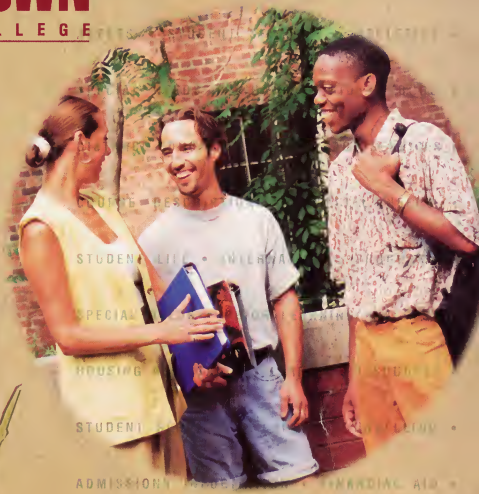
GEORGE BROWN

THE CITY COLLEGE



CAREER COUNSELLING • STUDENT LIFE • ADMISSIONS INFORMATION • FINANCIAL AID • PART-TIME • FULL-TIME • SCHOLARSHIPS • STUDENT RESOURCES • STUDENT LIFE • INTERNATIONAL • SPECIAL • HOUSING • STUDENT • ADMISSIONS • FINANCIAL AID • COURSE DESCRIPTIONS • ATHLETICS • TOURS • DISTANCE EDUCATION • ADULT LEARNING • INTERNATIONAL PROGRAMS • SPECIAL NEEDS • TOURS • COURSE DESCRIPTIONS • ATHLETICS • STUDENT ASSOCIATION • FINANCIAL AID • HOUSING ASSISTANCE • DISTANCE EDUCATION • ADULT LEARNING • STUDENT LIFE • TOURS •

96.1961 THE GEORGE BROWN

COLLEGE TELEPHONE DIRECTORY

For departments not listed below, please call (416) 867-2000 or toll free 1-800-265-2002.

Academic upgrading
Academic Skills
Development Department (416) 956-7330

Career development centre
Career planning services (416) 867-2207

Counselling
(416) 867-2107 (St. James)
(416) 944-4585 (Casa Loma)
(416) 867-2354 (Nightingale)

Enquiry centre
For information about full-time and part-time programs (416) 867-2464
or toll-free 1-800-263-8995

Financial assistance office
For information on student loans, scholarships and bursaries (416) 867-2476

Historical records, certificates and diplomas
(416) 944-4491

Registration centres
Admissions Centre (416) 944-4805
Casa Loma Campus (416) 944-4315
St. James Campus (416) 867-2460
Kensington Campus (416) 867-2445
Nightingale Campus (call Casa Loma) (416) 944-4315

Services for deaf and hard-of-hearing students
(416) 956-7313 TTY
(416) 956-7370 voice

Services for students with special needs
(416) 867-2622

Student career services for job and career preparation information, and job postings
(416) 867-2100 (St. James)
(416) 944-4585 (Casa Loma)

Student life office for information on housing, orientation and other student issues
St. James Campus (416) 867-2106/867-2674

Transcripts, grade reports and student records
Casa Loma Campus (416) 944-4315
St. James Campus (416) 867-2460
Kensington Campus (416) 867-2445

Tours
Liaison Office (416) 867-2062

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SUCCESS STARTS AT GEORGE BROWN

BOARD OF GOVERNORS

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Geargе Burtan
Registrar

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Executive Director, Campus Operatians

Tany Lennie
Controller

Richard Rasen
Informatian Systems (Acting)

Susan Stylianas
Student Services

Success starts when people look ahead to their future and set some specific goals. For 28 years, George Brown College has offered programs that have helped people to achieve their goal of a new or enhanced career.

George Brown is one of 23 colleges of applied arts and technology in the province of Ontario. It was designated the official college for Toronto by the provincial government.

Our programs are carefully designed to meet the needs of both our students and the people who will employ them after graduation. Course projects and case studies reflect the demands of the workplace. They also prepare students for a smooth transition to professional life.

George Brown College students enjoy educational advantages that are unparalleled in Canada. These include unique program content, top-flight faculty and (in many programs) work experience with some of Canada's top businesses and institutions.

Our location in the heart of Canada's most exciting city means that learning doesn't stop when students step outside of our buildings. All around them is a wealth of cultural, social and recreational opportunities.

George Brown College offers people from all backgrounds and all ages a rich and unique learning experience. For tens of thousands of people, success has started here.

WHAT'S IN A NAME?

George Brown College is named after one of Toronto's most famous citizens of the 19th century. George Brown (1819-1880) was a politician, Father of Confederation and founder of the Globe *newspaper, the forerunner of today's* Globe and Mail.

GEORGE BROWN COLLEGE
P.O. Box 1015
Station B
Toronto, Ontario
M5T 2T9
Canada

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YOUR CAREER PATH

Choosing a career is one of the most important decisions you can make. At George Brown College, we want you to choose wisely and well. That's why we offer a number of ways to help.

IF YOU...

KNOW

your general area of career interest (i.e., you know you want to work in a business setting or in the hotel and restaurant field, but you're not sure of the specific career or program):

▼

Look in the section of this book related to your interest area (e.g., Faculty of Business or Hospitality Centre).

▼

Read about the programs carefully. Your questions may be answered in the description there.

▼

If not, call the phone number listed at the bottom of the program page and ask for more specific details about the program.

DON'T KNOW

what you want to do, or if you feel confused or lack direction:

▼

Attend a free Career Planning Workshop at George Brown. These sessions may be offered in the daytime or evening. To find out the time and place of the workshop, and to register, call (416) 867-2062 or toll-free 1-800-265-2002 ext. 2062.

You will learn about some of your options for choosing a career when you attend the workshop. You can also:

▼ Call our Career Development Centre. See page 13.

▼ Tour the college. Call (416) 867-2062.

▼ Speak to a counsellor. See pages 11 & 12.

▼ Find out about programs offered at colleges and universities across the province by calling the Ministry of Education and Training at (416) 325-2929.

▼ Read about programs in this book. For part-time programs, get a copy of our Continuing Education calendar by calling (416) 867-2464 or toll-free 1-800-263-8995.

NOW...

IF YOU FIND OUT ABOUT A PROGRAM AT GEORGE BROWN THAT INTERESTS YOU:

Ask if there are any tours or information nights coming up for that particular program or for a group of programs offered by that faculty. Or ask if you can meet with a co-ordinator or chairperson in that department. Call the phone number listed on the program page.

OR

You can get general information on programs, fees, financial assistance, how to apply, mature students and admission requirements by attending a College Information Workshop offered by our Liaison Office. Call (416) 867-2062 to find out the time and place, and to register.

ADMISSION PROCEDURES

What are the admission requirements for George Brown College?

Some programs require basic-level credits or a minimum of Grade 10, while others require an Ontario Secondary School Diploma (OSSD) or equivalent. (If you do not have an OSSD, see the Mature Students section on page 7.) Other programs ask for very specific skills, work background or life experiences. For our post-diploma programs, you need a college diploma or university degree. Read carefully the prerequisites, background and recommended courses listed under each program title.

The minimum requirement for two-year and three-year **diploma programs** is an OSSD with credits at or above the general level. Many programs also require standing in particular subject areas or achievement of specific skills. The minimum requirement for our **certificate programs** (usually one year or less in length) is:

- Ontario Grade 10 or
- North American equivalent or
- Ontario Basic Training for Skills Development Level III or
- Academic Upgrading III or
- Ontario Certificate of Education.

A student applying to any George Brown program or course, who is under the age of 19 years at the start of the program or course, must possess an OSSD or equivalent.

What if I don't have the admission requirements for the program I want to take?

You may be able to apply as a mature student. (See page 7.) You may also be asked to come to the college to take an admissions test and/or attend an interview. (See the Admissions Testing section on page 6.) If you need further preparation to meet the admission requirements for any program, please call the college's Academic Skills Development Department at (416) 956-7330. You may also see a counsellor. (See pages 11 & 12.)

Where do I send my application?

See the How to Apply section on page 8.

Can I get advanced standing or exemptions?

If you have credits from another college, university or post-secondary institution and you wish to be considered for advanced standing (credit for an entire full-time semester or more), please check off the box marked "college/university transfer" under the heading Additional Academic Information in section A of the OCAS application form (see page 8). You should also indicate the semester or level you are applying to enter when you complete Section B of the application form.

If you wish to apply for individual course exemptions based on your previous studies, consult the chairperson of your program during your first week of classes.

Can I get credit for my learning outside the classroom?

The college recognizes that adults acquire knowledge and skills from a variety of experiences in their personal and work lives that are equal to the traditional college-level learning delivered in the classroom. The college is pleased to assist the adult learners in the process of translating their experiential learning into college credits by offering a Prior Learning Assessment (PLA) program. The PLA co-ordinator is available to meet with candidates on an individual basis to review their educational goals and to outline the various steps and options in the PLA process. For further information, please contact the PLA co-ordinator at (416) 944-4456 or see page 13.

How are applicants chosen?

Colleges of applied arts and technology do not admit students solely on the basis of grades, nor do they give preference to students who have completed studies beyond Grade 12 over those who apply with the minimum criteria.

For some programs, far more people apply than there are seats available. George Brown College wants to be sure that the people who get into a program have a good chance of succeeding. That's why you may be asked to come to an interview, take various tests, answer questions or demonstrate your skills. (See the Admissions Testing section on page 6.) Grades in prerequisite subjects may also form part of this evaluation.

Selection procedures may be changed at any time to meet the needs of the college and the applicants. Applicants will receive information about the selection process after their applications have been acknowledged.

Can I apply for financial assistance?

Applicants to full-time programs who are Canadian citizens or permanent residents may be eligible for financial assistance through the Ontario Student Assistance Program (OSAP). New OSAP forms are usually available each spring around March or April. You can get one from your high school or by calling (416) 867-2464 or toll-free 1-800-263-8995.

OSAP information workshops are given during the summer (from May to August) by staff in the Financial Assistance Office at George Brown College. Staff members will answer questions and help students in completing the OSAP form. To attend a summer OSAP workshop, call the Financial Assistance Office at (416) 867-2476.

There are no entrance scholarships for George Brown College. Each department may have prizes, bursaries and awards that are available to students who show exceptional ability. These are usually awarded to students who are near the end of the program. Student Award Handbooks are available in the Financial Assistance Office or Student Services.

Work-study is another option for students. You can earn money by working at jobs on campus. Call the Financial Assistance Office at (416) 867-2476 for details.

Students who study on a part-time basis may qualify for the Ontario Student Assistance Program. Call the Financial Assistance Office at (416) 867-2476 for more information. OSAP Bursaries for Child Care or Students with Disabilities may be available. Please check with the Financial Assistance Office at (416) 867-2476.

INTERNATIONAL STUDENTS

Applicants from foreign countries are eligible for most certificate and diploma programs at George Brown College, provided they can:

(1) demonstrate an academic standing equivalent to the Ontario academic prerequisites;

(2) establish proficiency in both spoken and written English — if they come from a country whose first language is not English or if the language of instruction is not English — through a test score of 550 in the TOEFL (Test of English as a Foreign Language), although the college will consider scores that range from 525 to 549 depending upon the sub-scores, student transcript and the type of program chosen. For more information on testing, see page 6. The college will also consider documents from the British Council English Language Testing Service (ELTS) or a score of 90 on the Michigan Test;

(3) fulfill any selective admission criteria for their chosen program; and

(4) obtain permission (student authorization) from the Canadian immigration authorities to remain in Canada for the length of the program and, where required, a visitor's visa.

International students in Toronto may complete English testing at the George Brown College Test Centre. Telephone: (416) 944-4564. See page 6 for information on testing. **NOTE: International students cannot apply as mature students.**

International students send their application for all programs to:

Office of the Registrar
International Student Admissions Centre
George Brown College
P.O. Box 1015, Station B
Toronto, Ontario
M5T 2T9
Canada

For more information, call (416) 944-4805.

This icon indicates that a program is specially designed for International Students.

THE COLLEGE ENVIRONMENT

As part of its commitment to provide students with an equitable, fair and safe educational environment, George Brown has established a number of policies and committees:

RACE AND ETHNIC RELATIONS POLICY

George Brown is one of the most multiracial, multicultural colleges in Canada, and we are proud of this diversity. We are committed to promoting racial, ethnocultural and religious equality among staff, students and the community. Our comprehensive policy articulates these commitments and identifies rights and responsibilities for all members of our community. The college has a responsibility to maintain an environment free of harassment and discrimination. An incident of expressed bias and discrimination could involve anyone in the college community. The incident could be intentional or unintentional, subtle, passive or overt and it could take a verbal, non-verbal or physical form. Typical expressions of bias or discrimination are avoidance or exclusion, rude behaviour, stereotyping, name-calling, jokes and slurs, insults, threats or intimidation. If you feel that you have been subjected to an incident of bias or discrimination and you cannot resolve the situation with the offending party, you may then make a formal complaint with the Chair of your department. If your complaint is not resolved at the departmental level, you can ask your Dean to request that an Appeals Committee be struck to hear your complaint. For further information, contact your Chair or Dean, the director of Student Services or the Office of the Human Rights Advisor at (416) 944-4715.

SPECIAL NEEDS POLICY

Students and staff with physical, sensory, learning or emotional disabilities may have special needs that must be met relative to their participation in the life of the college. George Brown has established a policy to ensure that all students and staff with special needs may participate fully and safely in the educational, social and cultural life of the college.

ADVISORY COMMITTEE FOR EQUITY (ACE)

Made up of staff and student volunteers, ACE helps to advance equity at the college for those groups who feel that they have encountered discrimination predicated on culture, race, language, gender, sexual orientation, class, age or physical, mental, learning or emotional disabilities. ACE works to ensure that the college curriculum is free of stereotyping and sex bias, and that every individual has access to the full range of college programs and related occupations.

George Brown also has policies and procedures to ensure that staff and students are free from sexual harassment.

SMOKING POLICY

George Brown College believes that students and staff have the right to learn and work in a smoke-free environment. Smoking is not permitted in college buildings. If you smoke outside the doors, please place your cigarette butts in the ashtrays or garbage cans. Your co-operation in keeping the college clean and attractive is appreciated.

WOMEN'S SAFETY COMMITTEE

This committee was set up to examine, resolve and raise awareness of safety issues and needs in the college, to improve security in our buildings and to focus on the issue of violence against women.

ADMISSIONS TESTING

What is the purpose of testing?
We want you to succeed at George Brown College. By testing you, the college will be able to determine whether you have the skills and aptitude to successfully complete the program of your choice. You will be tested on your math and English skills, and you may have to answer some science questions, depending on the program you wish to take.

Who is tested?
If you apply as a mature student (see page 7) or if you apply to one of the more popular programs at the college (called "oversubscribed" programs), you will be asked to come in for testing. International students may also be asked to take admissions tests. The Admissions Centre will mail you a notice of the place, date and time of your test at the college's Test Centre. Your test results will determine your eligibility.

What if I don't know if my skills will meet the program requirements?
If you're not sure if you have the program requirements, you do not have to wait until you have applied to find out if you need testing. If you want to get into a program in September, you can start planning for it as early as the **previous** fall — October or November. You can call the department of the program you have applied to and ask them to make an appointment for you to be tested at the Test Centre at George Brown College. You can also call the Test Centre yourself to book an appointment at (416) 944-4565, but if you have not applied to a program, it will cost you $50. When you apply to the college, attach a note to your application stating when you were tested, or attach your test results to your application. Results of your test are kept on file at the Test Centre. If you are tested early and you do not meet the minimum requirements for a program, you may have time to upgrade your skills and to be tested again before the program is filled.

What if my transcripts are from a foreign country?
Apply to the college and include academic documents from your country. All academic documents that are not in English must include a certified translation from the host school, college or university. These documents will be assessed by the Registrar's Office. If your documents are from a foreign country, we will test you in English or request that you take a Test of English as a Foreign Language (TOEFL). If you are missing any subjects, the Registrar's Office will make an appointment for you to be tested at the Test Centre.

Where is the Test Centre?
It is on the first floor of 146 Kendal Avenue, Casa Loma Campus, George Brown College. See map of the Test Centre, page 7.

How long is the test?
The normal testing procedure runs from 8:30 a.m. to 1 p.m. or from 3:30 to 8 p.m. Some people may finish the test sooner than others, depending on their level of ability and the number of tests they must write.

Is there a waiting list to be tested?
Your appointment can usually be arranged within two or three days of your call to the Test Centre.

Must I bring anything with me to the Test Centre?
You will be asked to bring your Social Insurance Number and proof of identification. Photo I.D. is required. If you have paid in advance, you must bring your receipt or test appointment sheet with you. Bring any forms or letters that you have. You may **not** bring a calculator, dictionary or any other aids with you when you write the test.

Do I have to pay to take the test?
If you are taking a general admissions test and have not applied to a specific program, you must pay $50. There is a $25 fee for all Health Science admissions tests, except Dental Hygiene, which costs $40.

Who do I call to find out my test results?
Do **not** call the Test Centre. Test results will be mailed out from the Admissions Centre. If you do not hear, call the department or the party who requested the tests for you. Your test results are confidential and will not be given out without your consent.

What can I do to prepare for the test?
If you plan to go for testing, ask for a Test Information Booklet to be sent to you. To get a booklet, call (416) 944-4565. This booklet contains important information and sample test items. Also, anyone who is booked for a test can attend a **Test Orientation** held every week at the Test Centre. You must call ahead to (416) 944-4565 to attend this workshop. At the workshop, you will get to see sample questions, discuss the purpose of testing and ask questions. We encourage you to attend this workshop to learn more about the testing process. If you are applying as a mature student, you can take a new preparation course. (See the Mature Students section on page 7.)

What if my test results are not high enough for me to get into a program?
Requirements vary from program to program. Your test results are forwarded to the department where you are applying. If you have applied for a post-secondary program starting in September, a letter will be sent out after May 15 to tell you if you have been accepted. If you did not meet the minimum requirements for the program you chose, we will tell you about a number of options you have to improve your skills.

For more information on admissions testing, call the Test Centre at (416) 944-4565.

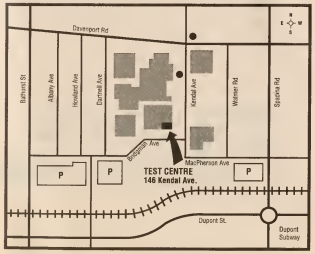
MATURE STUDENTS

What is a mature student?
A mature student is a person who is 19 years of age or older on the start date of the program **and** who does not have an Ontario Secondary School Diploma (OSSD). If you meet these qualifications, check off "mature student" on your college application form. Some programs ask that you have specific subjects (e.g., Grade 12 chemistry) as well as your OSSD. If you have your diploma but are still lacking some prerequisites listed for the program you want to take, the college may ask you to come in for testing. See the Admissions Testing section on page 6. If you are an international student, you cannot apply as a mature student. Instead, see the International Students section on page 5 and the Admissions Testing section on page 6.

If I apply as a mature student, am I exempt from all program prerequisites?
No. Those who apply as mature students must still take admissions tests and/or attend an interview to determine whether they are eligible.

If I apply as a mature student, when should I apply?
For post-secondary diploma and certificate programs starting in the fall, apply as soon as possible after **JANUARY 1** to allow time for admissions testing. For other programs, call the number listed with the program you want to take.

What tests will I be asked to take?
As a mature applicant, you will be tested on basic academic skills in English and math. You may also be asked to write special tests depending on your program. Mature applicants will be admitted to college if their test results are satisfactory and if they have the maturity to succeed. (For more information on testing, see the Admissions Testing section on page 6.)



PREPARATION COURSE FOR MATURE STUDENTS

A preparation course has been designed for people who have applied or are planning to apply to George Brown College as mature students. The Testing for Mature Students course is offered by the Academic Skills Department and runs one evening a week for 10 weeks. The course gives you a chance to review your academic skills in English and math in preparation for the mature student admissions test. For more details on Admissions Testing, see page 6.

For more information on this course, check the Continuing Education Calendar or call the Academic Skills Development Department at (416) 956-7330.

TEST CENTRE
The Test Centre is located on the first floor of 146 Kendal Ave., on the northwest corner of Bridgmon Ave. If you have questions or wont general information, please go to the Test Centre reception office in Room E123.

HOW TO APPLY

STEP 1: Find the page listing the program you want to take.

STEP 2: Look on the top left-hand side of the page for the black square.

STEP 3: Check to see whether the square says OCAS or GBC.
Then follow the next steps under **one** of these two columns.

OCAS

ONTARIO COLLEGE APPLICATION SERVICE (OCAS)

STEP 4: Get an OCAS application form and Applicant Guidebook. If you are now enrolled in an Ontario secondary school, you can get the form from your high-school guidance office. OCAS application forms are also available from George Brown by calling (416) 867-2464 or toll-free 1-800-263-8995. Forms are also available at other community colleges, high schools and the OCAS office at (519) 763-4725.

STEP 5: Fill out your form and include a $25 application fee. You may apply for up to **five** programs at Ontario community colleges, with no more than **three** program choices at the same college. There is space on one application form to list all of your program choices. All choices are treated equally and simultaneously. If you are applying to a program that starts in the winter, mail your form and fee to the OCAS address listed below.

STEP 6: For programs starting in September, mail your application form and fee after **JANUARY 1** to:

Ontario College Application Service
P.O. Box 810
Guelph, Ontario
N1H 6M4, Canada

All applications that are received by OCAS by **MARCH 1** will be treated on an equal basis. Applications received after March 1 will be treated on a first-come, first-served basis.

STEP 7: Offers of admission will be sent out after **MAY 15.** You may accept only one offer of admission from among the offers sent by the colleges. You must send back your confirmation of acceptance directly to OCAS on the form provided. There is no confirmation fee for applicants going through OCAS.

OR

GBC

GEORGE BROWN COLLEGE

STEP 4: Get an application form from the college. For specific questions about the program, call the phone number listed on the program page in this book. For general information or application forms, write to:

Enquiry Centre
George Brown College
P.O. Box 1015, Station B
Toronto, Ontario
M5T 2T9
Or call (416) 867-2464
or toll-free 1-800-263-8995.

STEP 5: Apply as soon as possible. Send your completed application form and any supporting documents to:

Office of the Registrar
George Brown College
P.O. Box 1015, Station B
Toronto, Ontario
M5T 2T9

STEP 6: Offers of admission are sent out at various times depending on the start date of the program. Call the Admissions Centre at (416) 944-4805 or the phone number listed at the bottom of your program page for more information.

INTERNATIONAL STUDENTS see page 5

FEES

POST-SECONDARY PROGRAMS:

(DIPLOMA, POST-DIPLOMA AND ONE-YEAR CERTIFICATE PROGRAMS)

Tuition	$1,108 per year (for a standard-length program of 32 to 34 weeks per year). Fees for non-standard programs may be different.
Student Activity Fee	$100 per year (collected on behalf of the Student Association, Athletics and the Student Centre Building Fund)
Transcript/Locker/ Graduation Fee	$43 per year
Materials and Supplies	Variable. Most programs charge extra materials fees for special equipment and supplies used in the classroom. Depending on your program and the equipment needed in that field of study, materials and your books, supplies and sometimes uniforms could cost from zero to $1,500 per year. Call the phone number listed at the bottom of the program you want to take for specific details on the materials, books and supply fees.
Application Fee	Students applying to post-secondary programs must send their application and a $25 non-refundable application fee to the Ontario College Application Service (OCAS). See page 8.
I.D. Fee	$6
Student Assistance Fee	$15 (includes support services for learning resources, counselling, health services, orientation)
Alumni Fee	$15 (payable in final year of program)
Total Fees	**$1,297 per year** (not including materials and books)

All students must **pay in full** their fees for the entire academic year by **JULY 15.**

Fee deferrals: Under extenuating circumstances, students may be able to defer partial payment of their fees, but each case is assessed on an individual basis. Students getting financial aid from OSAP must still pay by the due date. For more information, call the Deferral Office at (416) 944-4747. Students who get an approved fee deferral must pay a $45 non-refundable deferral fee.

For information on financial aid, see page 4. For fee refunds, see page 10.

MOST UPGRADING AND SKILLS PROGRAMS:

Tuition	**$28.15** per week, payable prior to start of program or semester installments (not including materials and books)
Campus Service Fee	$12, payable with first tuition installment
Transcript/ Graduation Fee	$15
Student Activity Fee	$2.50 per week (collected on behalf of the Student Association)

ENGLISH AS A SECOND LANGUAGE PROGRAMS:

Tuition	**$31** per week, payable prior to start of program (not including materials and books)
Campus Service Fee	$12, payable with first tuition installment
Transcript/ Graduation Fee	$15
Student Activity Fee	$2.50 per week (collected on behalf of student councils)

INTERNATIONAL STUDENTS:

International students will pay **$9,215** per year (not including additional fees for materials, books, student I.D., alumni, etc.) for post-secondary diploma and post-diploma programs of standard length (32 to 34 weeks). Their fees for the entire academic year must be paid in full by **JULY 15**. International students entering certificate programs will pay **$256.30** per week, payable in 16-week installments (not including materials, books or incidental fees), except ESL which will be **$250** per week. To apply, see page 5.

SENIORS:

The tuition fee for full-time programs for students age 60 or over is $50 per academic year (not including materials and books). Applicable materials fees must be paid.

FEE CHANGES

The tuition fees quoted here are regulated by the Ontario Ministry of Education and Training. These and other related fees listed above are for the 1994/95 academic year. **Fees are subject to change,** without notice, with the approval of the Government of Ontario and/or the Board of Governors at George Brown College.

GENERAL INFORMATION

ARTICULATION AGREEMENTS WITH SECONDARY SCHOOLS

Articulation is the process of linking secondary schools to colleges to help students make a smooth transition to college — without experiencing delay or duplication of learning. George Brown College has signed articulation agreements with the Toronto Board of Education, Metropolitan Separate School Board and York Board of Education. Students who have graduated from schools in these boards may be able to obtain exemptions for a number of courses once they are accepted into a program at George Brown. For more information, see your guidance counsellor or call the articulation co-ordinator at your local school board.

DECISIONS ON ADMISSION

The college Registrar's Office is empowered to accept, defer or reject any candidate's application for admission to any program. The Registrar reserves the right to test any applicant or to require validation or re-submission of official documents in the event of any uncertainty about academic credentials or capabilities.

PRIORITY OF ADMISSIONS

Provincial government regulations require that applicants be admitted in the following order of preference:

(1) Permanent residents of Ontario;

(2) Permanent residents of other Canadian provinces and territories; and

(3) Students from other countries.

FEE REFUNDS

(a) For the purposes of calculating tuition fee refunds, the effective date shall normally be the date the student submits a written request to withdraw to the Campus Registration Centre or the Office of the Registrar.

(b) Canadian citizens and permanent residents who officially withdraw within 10 class days from the beginning of a semester are entitled to receive a refund calculated as follows:

- full tuition fees for that semester less a $50 administrative service charge; and
- all fees paid in advance for subsequent semesters.

(c) International students who officially withdraw within 10 class days from the beginning of a semester are entitled to receive a refund calculated as follows:

- full tuition fees for that semester less $455 administrative service fee
- fees paid in advance for subsequent semesters.

(d) All students may obtain a refund over a period of five class days after the initial 10-day refund period if they are required to withdraw from the college as a result of a promotion meeting or at the request of their department or the registrar.

(e) The fixed fee is refundable only within the refund period of the first semester in which a student registers for each academic year. The fixed fee is defined as the Student Activity fee and the transcript and graduation fee.

(f) Refunds will be paid by cheque or credited to the charge card accounts to the registered students, the agency or the company paying the student's fees, but not to any other individual.

(g) Students who receive a bursary from OSAP for either child care or disability-related expenses will have their refund fees paid to the Treasurer of Ontario.

(h) Materials fees may not be refunded. To inquire, call the department of the program in which you were enrolled.

FULL-TIME/PART-TIME PROGRAMS

Some full-time programs are also offered on a part-time basis. If you are interested in part-time studies, contact the chairperson of the program for more information. To find out about our part-time, evening and weekend courses, get a copy of our Continuing Education calendar. Call (416) 867-2464 or toll-free 1-800-263-8995.

A full-time student is one who is enrolled in 70 per cent of the contact hours or two-thirds of the courses required for his/her program.

If full-time students are granted course exemptions, they may, with the permission of their program chairperson, substitute another course at no extra charge beyond the full-time fee, provided the extra course is taken in the same term as the exemption.

Full-time students with a full program load who wish to enrol in additional part-time courses must pay the required fee for each additional course.

PROGRAM CANCELLATION POLICY

Prior to a decision to suspend or phase out a program, the college will provide the students enrolled in the program with the opportunity to complete the program within the normal time period (i.e. the Ministry-approved program duration).

As a general principle, the college will provide the students with the opportunity to complete the program at the college in which they are enrolled. However, there may be special circumstances where it is not possible for the college to do so, or where a transfer of the students to another college would be more practical for both the students and the college.

Under such circumstances, the college has the responsibility to assist the students to become enrolled in the same program offered by another college located within a reasonable distance from the college.

CLASS TIMETABLES

Class timetables produced by the college are statements of intent on the part of the college that will be followed as closely as circumstances permit.

However, the college reserves the right to change class timetables without notice due to unforeseen circumstances or circumstances beyond the college's control. Class timetables will be distributed to the students in accordance with the specific divisional policy. Students can expect to be scheduled for class anytime between 8 a.m. and 6 p.m.

CHANGES TO PUBLISHED INFORMATION

The program descriptions in this calendar are statements of intent on the part of the college that will be carried out as closely as circumstances permit. Policies and procedures were those in effect at the time of publication.

However, the college reserves the right to change, without notice, any published information that may subsequently require correction or amendment due to circumstances beyond its control.

The college also reserves the right to change or cancel a program or course when enrolment is insufficient or employment opportunities for graduates appear inadequate, and to withdraw offers of acceptance or refund any fees paid for such programs or courses. The college will not be held liable in any material way for difficulties created by any required changes in curricula.

In order to provide smooth and efficient services for students, we are currently upgrading our central computer systems. This will result in some changes to our published admissions policies and procedures. We kindly ask for your patience and understanding while this is taking place.

SERVICES FOR STUDENTS

ATHLETICS

When class is out you can keep in shape at our three campus gyms, with activities ranging from aerobics to weight training to tai chi to tennis. Or, you can be a part of the many intramural teams, such as badminton, basketball, touch football, volleyball, soccer, tennis and table tennis.

George Brown also boasts an impressive array of varsity teams. As a member of the Ontario Colleges Athletic Association, our men's and women's "Huskies" teams challenge other Ontario college teams in sports such as soccer (indoor and outdoor), basketball, volleyball, cross-country running, badminton, alpine skiing and touch football.

STUDENT ASSOCIATION

The Student Association of George Brown College is an independent, student-funded, student-run advocacy and service group.

Its primary focus is to represent student interests both in the college and at all levels of government.

The Student Association provides such services as a student health plan, photo I.D., copy centre (tentative Sept. 94), clubs, CBFM radio, *Dialog* student newspaper, SAC Shack store and the Camp Zu pub.

For information regarding these services or how to get involved, please call your campus Student Association office.

Student Association Offices: Main – 867-2454

St. James
200 King St. East, Room 113
(416) 867-2455

Casa Loma
160 Kendal Ave., Room 210
(416) 944-4730

Nightingale
2 Murray St.
(416) 867-2463

Hospitality (St. James)
300 Adelaide St. East, Room 254
(416) 867-2244

HOUSING

Although George Brown does not have student residences, Toronto offers a wide variety of accommodations in many interesting neighbourhoods.

In addition to checking the classified sections of Toronto daily newspapers for rental accommodation, you should visit our college housing service at St. James Campus. Linked by computer to the housing services of the University of Toronto and Ryerson, our housing office lists between 1,000 and 2,000 available accommodations. Houses, apartments, townhouses, boarding situations, sublet and shared accommodation are included. The listing is updated daily and phones are provided free of charge for students to call prospective landlords. A giant map of the city is also available to plot housing locations.

Thanks to Toronto's excellent public transit system (the TTC), students don't have to limit their housing search to downtown Toronto. Subways, buses and streetcars provide easy access to all corners of the city. GO Transit connects communities surrounding Toronto with the TTC.

For more information about housing, call the Monager of Student Life at (416) 867-2674 or 867-2101.

STUDENT LIFE

The Student Life Office coordinates programs and activities to enhance the quality of student life, to encourage and expand student involvement with the campus community, to aid students in their transition to the college and to integrate students into the life of the college.

The Student Life Office works with the Student Association and other student leaders to ensure that all students have opportunities to become involved in college life. We encourage students and staff to become involved in issues and programs that both educate and entertain, and foster understanding and cooperation among our diverse student body.

The Student Life Coordinator also serves as an advocate for students by providing them with advice on college policies and procedures, rights and responsibilities, and general guidance on where and to whom complaints and enquiries are appropriately directed.

For more information, call the Monager of Student Life at (416) 867-2674 or 867-2101.

STUDENT CAREER SERVICES

The mission statement of Student Career Services at George Brown is "to assist students in developing their abilities to create and develop a positive and fulfilling working life in an evolving and unpredictable work environment."

Located at all campuses, Student Career Services is a free, optional service available to George Brown students and graduates, advocating a new mind-set of life-long learning and life-long career learning as another step in linking education and employment. This service complements other departments and divisions by providing to students:

- a series of workshops and presentations on job search strategies, the importance of research and information gathering, and the awareness of interview skills, self-assessment and current job trends;
- assistance with resumés and covering letters;
- individual career advisement on an appointment basis;
- an annual College Graduate Placement Report;
- employment listings of full-time, part-time, temporary, summer and contract positions, as provided by employers;
- free hand-out material on current resumé and job-searching advice;

and to employers:

- assistance in creating help-wanted advertisements;
- annual marketing mail-outs to encourage the hiring of George Brown students and graduates;
- information on college programs and graduate availability to assist in company recruitment planning.

ALUMNI SERVICES

The Alumni Services Office is a new addition to Student Services that encourages and provides continued involvement with the college after graduation. The service will maintain and strengthen the link between graduates and the college through alumni events, regular correspondence and the creation of an alumni directory.

For more information, coll the Alumni Coordinator ot (416) 867-2106.

COUNSELLING

The move to college can be a challenging transition for many people – particularly those who have been away from formal education for a few years. With the assistance of our professional counselling staff, that transition can be smooth, rewarding and successful.

Our counsellors are available to help students solve problems and develop winning strategies to reach their personal, educational and career goals. Counselling interviews are free and confidential. In addition to one-on-one appointments, counsellors offer workshops on topics such as:

- study skills
- self-confidence and assertiveness
- exploring career options
- stress management

The phone numbers for our offices are:

St. James Campus	(416) 867-2107
Casa Loma Campus	(416) 944-4585
Kensington Campus	(416) 867-2374
Nightingale Campus	(416) 867-2354

PEER TUTORING

Our successful Peer Tutoring program is based on the premise that students helping students is rewarding for all. Peer tutoring provides one-to-one assistance to students having difficulty with specific courses by students who have achieved above-average scores in those subjects.

Most tutors are second- or third-year students who complete a training program and are paid by the college. They assist students who are either experiencing difficulty in a subject or simply wanting to maintain their standards.

The best part is that tutoring is free. If you want to become a tutor, or if you need a tutor, don't wait until the last minute. Sign up in the Counselling Office at your campus early in the school year.

CHILD CARE

Many students at George Brown College are also parents. If you are planning to come to college and you need child care, you should begin to make arrangements for child care immediately, even before you have been accepted to your program, since waiting lists for child care spots are often long. George Brown College operates eight child care centres, and our students are given priority for spaces. Full-time students are eligible for subsidized child care, but the number of subsidized spaces is limited and the waiting list is usually long. When applying for child care, call the individual child care centres to get your name on the waiting list as soon as possible. If you want a brochure about child care, call the George Brown Enquiry Centre at (416) 867-2464 or 1-800-263-8995. Or for more information, call (416) 867-2359.

STUDENTS WITH SPECIAL NEEDS

The Special Needs Office provides assistance to students with physical, learning and emotional disabilities. Specialized technical equipment is available to help students. The main office is located in Room 577E at St. James Campus, but students at any campus can make appointments and get assistance. All campuses are easily accessible by public transit and Wheel Trans. Most buildings are equipped with ramps, elevators and special washrooms. Students who want assistance should contact the Special Needs Office as soon as they have been accepted at George Brown. That will ensure that assistance can be provided as soon as possible. Accommodations or assistance may also be provided with the application process. Call us at (416) 867-2622.

CAMPUS RESOURCE CENTRES

Each of the college's library resource centres is unique, reflecting the various specializations of the campus. All students, staff and faculty have access to the resources, facilities and services available at each campus. You can find almost anything in your resource centre — books, periodicals, films, videos and VCRs, computers and software, audiocassettes and newspapers. Fax machines are available for your use in the Casa Loma and St. James campus resource centres. Each centre offers facilities for research and study, viewing films and videos, academic and personal computing and some special needs services. Resource centre staff are available to help you locate the information you need for study, projects and assignments. Make the most of your college experience by discovering early in your term what your campus library resource centre has to offer you.

HEALTH CENTRES are staffed by registered nurses and first aid providers who offer emergency care, health counselling and referrals for illness and injury.

BOOKSTORES (at St. James, Casa Loma and Kensington) are equipped to provide most of the book and supply needs of students in all programs at the college.

DISTANCE EDUCATION (OFF-CAMPUS COURSES)

Would you prefer to complete some of your studies without attending classes at a college campus?

Off-campus courses are equivalent to the on-campus courses in terms of objectives, content, challenge and testing. They may use video, audio tapes, computer conferencing or teleconferencing to supplement the text components.

This kind of study allows you to work according to your own schedule. It eliminates travel to and from the college, providing a way for those who cannot or choose not to come to regularly scheduled classes to take college courses. You will have access to a teacher to answer your questions and talk about ideas, but you will work on your own most of the time.

For more information or to discuss the kinds of off-campus courses you would like to see offered, call (416) 944-4742.

CAREER DEVELOPMENT CENTRE

ARE YOU THINKING ABOUT CHANGING YOUR CAREER?

George Brown College offers a comprehensive career planning service to help you make the right career decision.

The Career Development Centre offers the following services:

IN-DEPTH TESTING AND CAREER EXPLORATION PACKAGE

The package is available for individuals — with personal evaluation, interpretation and counselling — or you may choose to be part of a group. Included are assessments and interpretation, "Choices" career research and career goal development.

À LA CARTE SERVICES

Each of these services may be purchased separately. They are available for individuals or you may choose to be part of a group.

- Personality assessment (Myers-Briggs)
- Interest inventory (Strong)
- Aptitude battery (CAPS)
- Skills identification
- "Choices" career research
- Career goal development
- Job search training

CORPORATE WORKSHOPS

These can be developed to meet the needs of organizations in the area of:

- team building
- manager as career coach
- stress management
- implementing career development strategies
- assertiveness training

SINGER HANDS-ON WORK STATIONS

Up to three hours of self-exploration at one of 12 different, simulated work stations, with initial instructions from a qualified counsellor.

Fees available on request. Please call the Career Development Centre at (416) 867-2207 for complete details.

PRIOR LEARNING ASSESSMENT (PLA)

WHAT IS PRIOR LEARNING ASSESSMENT?

Prior Learning Assessment is a province-wide initiative that enables students to receive college credits for knowledge and skills gained through work experience, community work, non-credit courses or other studies.

To be eligible for PLA, you must be at least 19 years old or have an Ontario Secondary School Diploma. When you have successfully "challenged" a course, the credit you gain will become part of your academic record.

PLA information sessions will be held periodically. Please contact the PLA coordinator at (416) 956-7309 for dates and locations.

HOW MANY COURSES CAN I GET CREDITS FOR THROUGH PLA?

You can attain a maximum of 75 per cent of program credits through the PLA process, with the remaining 25 per cent to be completed in class. Prior learning assessment is available for many courses currently listed in this calendar.

WHAT IS THE PLA PROCESS?

There are two primary methods of prior learning assessment:

1. **Challenge Process Evaluation**

   If you want to be credited for only one or two courses, you may want to choose challenge process evaluation. This method of assessment measures your knowledge of a certain subject area against specific course statements of expected learning. You will be granted a credit based on one or more of the following testing methods: written or oral exams, interviews, case studies or skills tests.

   You must complete a separate challenge process evaluation for each course.

2. **Portfolio Assessment**

   You should investigate portfolio assessment if you would like to receive credits for several courses. A portfolio is an organized dossier or collection of material that identifies your achievements and clearly exhibits your skills acquired through work experiences or previous education. When your portfolio is developed, faculty assessors will determine how your prior learning translates to college credits.

   A part-time course is available to assist you in developing a portfolio for evaluation. You will also gain a general education credit (which can be applied to your full-time program) upon successful completion of the course. Please check the continuing education calendar for more details, or call (416) 956-7360.

HOW MUCH DOES PLA COST?

You must pay a non-refundable fee of $55 for each course you challenge through PLA. The tuition fee for the Portfolio Development course is $128.40.

For more information about PLA, call (416) 956-7309.

SERVICES FOR DEAF AND HARD-OF-HEARING STUDENTS

Many consider George Brown College the leader in post-secondary education for deaf and hard-of-hearing students in Canada. About 25 per cent of all deaf and hard-of-hearing Canadian post-secondary students, mostly from Ontario, attend George Brown.

Deaf and hard-of-hearing students have equal opportunity for access to our full-time certificate and diploma programs. Deaf and hard-of-hearing students can ask for and receive educational support services to help them succeed in their studies at college. These services are free of charge.

If you are a deaf or hard-of-hearing student applying to George Brown College:

1. When you apply to George Brown, send a copy of your application form to: Deaf Education Centre, George Brown College, P.O. Box 1015, Station B, Toronto, Ontario, M5T 2T9.
2. One week after you have applied to George Brown, contact the chairperson of the program you have chosen.

   Call, through the Bell Relay Service, the George Brown College switchboard at (416) 867-2000 or 1-800-265-2002 (voice) and ask the operator for the chairperson of your program choice. Check with the chairperson about the requirements for the program. Ask the following questions:

   - Do I need an interview with the chairperson?
   - Do I need to take an admissions test?
   - What other requirements are there?
3. If you require an interview or a test with the department, and you need an interpreter, call (416) 956-7370 (voice) or (416) 956-7313 (TTY) one week in advance.

   If the interview or test is cancelled for any reason, please inform the office.
4. When you are accepted by George Brown College, contact the Deaf Education Centre at (416) 956-7370 (voice) or (416) 956-7313 (TTY).

VISITING THE COLLEGE

Deaf and hard-of-hearing students and/or their parents may come to the college for a personal interview or group tour. An appointment should be arranged in advance by calling (416) 956-7370 (voice) or (416) 956-7313 (TTY).

PROGRAMS AND SERVICES

To find out about programs such as Academic Upgrading for Deaf and Hard-of-Hearing Adults, and College Orientation for Deaf and Hard-of-Hearing Students, look in the section of this calendar called Access and Preparatory Studies.

SUPPORT SERVICES

Services for deaf and hard-of-hearing students include interpreting, notetaking, pre-teaching, academic advising and technical devices.

For information, call (416) 956-7370 (voice) or (416) 956-7313 (TTY).

GENERAL EDUCATION

Effective in the fall of 1994, every full-time post-secondary program will include one three-hour general education course per week each semester.

General education courses are intended to increase students' awareness of the world in which they live; to give them an understanding of their rights and responsibilities as citizens in their society; to foster in them the ability to express themselves cogently on a variety of human issues; to facilitate the development and utilization of generic skills such as literacy and numeracy, and to engage them in a program of life-long learning.

At the time of publication, curriculum revisions to incorporate general education courses were still under way. Please consult the contact person on each program page for the most up-to-date information.

STUDENT RECORDS

Your academic record at George Brown College is permanent and will serve you for years to come as you continue your academic and employment ventures. It is therefore in every student's best interest to maintain an accurate student record with the college by following the established college practices.

The Registrar is responsible for the recording of student grades and academic standing submitted by the academic departments, the computation of grade points and grade point averages, the production of transcripts and the granting of diplomas and certificates.

HOLDS ON STUDENT RECORDS

Student records may be held from release by the college for the non-payment of fees, failure to return college property or any other outstanding issue not settled with the college. Student records includes transcripts, grade reports, certificates or diplomas, tax forms, letters of attendance and other college-supplied documents.

TRANSCRIPT ENTRIES

Official Withdrawal

Students wishing to withdraw from the college must do so by filling out an official withdrawal form, available at any of the campus registration centres. The transcript entry will reflect the date the withdrawal form was submitted to the college by the student, and the student's academic status will show as "WITHDRAWN". The calculation of any possible refund is based on the date the withdrawal form was submitted to one of the registration centres.

Non-Attendance

Students who stop attending classes and do not officially withdraw will be reported as non-attenders by the academic departments. These students will receive grades of "F" on each course and will show an academic status of "FAILED" on their transcript. The deadlines for withdrawing from programs without academic penalty are published in the post-secondary/continuing education academic calendar of important dates listed in your student handbook. For more information, refer to the handbook or call the Registrar's office at (416) 944-4500.

Program Transfers and Registrations

Program transfers and registrations will be shown chronologically on the transcript record. No modifications can be made to the chronological history of a student's attendance at the college. In addition, transcripts may not "selectively" report only part of your academic history with the college.

Course Grades and Grading System

Course grades are recorded using letter values. The values of "A+" to "D-" are considered passing grades. Failures are denoted by the letter value "F".

If a course is failed, it must be redeemed by repeating the course, taking supplemental exams, requesting an appeal or by conversion to a symbolic grade. At first, the failed course is included in the grade point average calculations. If the course is repeated, the original failed grade will remain on the transcript, but it will not be used in the grade point average calculations. The new grade will be recorded and included in the grade point average. A course may be repeated a maximum of three times.

PERCENTAGE MARK*	LETTER GRADE*	GRADE POINTS*
95-100	A	4.0
90-94	A-	3.7
85-89	B+	3.3
80-84	B	3.0
75-79	B-	2.7
70-74	C+	2.3
65-69	C	2.0
60-64	C-	1.7
55-59	D+	1.3
50-54	D	1.0
0-49	F	0.0

*** The college's grading scale is currently under review.**

Honours Designation

A student will receive an honours designation by semester if the semester grade point average is 3.5 or higher.

In Good Standing

A student is considered "in good standing" if all courses are passed and the semester grade point average is 1.5 or higher.

On Condition

A student is considered "on condition" if one or more courses are failed, or if the student has a semester grade point average of 1.5 or less.

Graduation Requirements

A cumulative grade point average of 2.0 is required for graduation. Students with a cumulative grade point average of 3.5 or higher will be awarded graduation with honours. Students must not have any unredeemed failures, withdrawals or other "not passed" designations on their record. A student owing fees or other debt to the college is not eligible to graduate, and no transcript will be issued.

Access to Student Records

Students' academic records are the property of the college. The college is bound by the legislation of the Freedom of Information and Protection of Privacy Act (1987). Students may have access to view or copy their own records in the college. Academic records are considered confidential, and access to them is only granted with written permission by the student, or at the request of the student. Formalized request forms for access to student records (including transcripts and grade reports) are considered a safeguard for both the student and any internal or external communicators with the college.

Student Appeals and Responsibilities

Complete policies on student appeal of grades are available from any academic department. Every student should make the effort to ensure that his or her student record file is up-to-date and accurate. Practices requiring the completion of special forms (such as withdrawal or transfer forms) or that require action by certain dates are especially crucial to ensure an accurate student academic record.

FACULTY OF ACADEMIC STUDIES & RESOURCES

Dean:
Ronald C. Waldie

Associate Director, Educational Resources:
John Hardy

Chairpersons:
Marsha Skolnik
Language Training

Rejeanne Dupuis (Acting)
Centre Français

Anne MacKenzie
English and Liberal Studies
(Casa Loma and Nightingale campuses)

Fran Dungey
English and Mathematics
(St. James Campus)

Al Budzin
Liberal Arts and Science
(St. James Campus)

The Faculty of Academic Studies and Resources, a new division in the college, combines three major themes in the academic life of this institution: teaching, learning and partnership. It comprises five teaching departments and Educational Resources that include all the Learning Resource Centres and Audio Visual Services in the college.

As one of the largest, oldest and most respected trainers of ESL in Canada, we are very proud of our role in introducing new Canadians and international students to our country and a new language. The Language Training Department and the Centre Français share a leading role in one of the primary teaching themes of the faculty: the acquisition of a second language. The George Brown College Centre Français is the official Metro Toronto college dealing with matters concerning French language study. Both departments offer successful professional programs in Teaching English and French as a Second Language (TESL, TFSL) and both are active partners in the college's emerging International programs.

All the departments of Mathematics, English, Liberal Arts and Science share a leading role, in partnership with other faculties in the college, in providing Communications, Mathematics, Science and General Education courses in certificate and diploma programs. The faculty also offers a two-year diploma program in General Arts and Science which is designed for students who have yet to define a clear vocational goal.

For students who are interested in the health sciences, especially Diploma Nursing, we offer a Pre-Health program that provides a solid grounding for future studies in Nursing, Allied Health and other diploma programs in the college. (See the Health Sciences section of this calendar for more details.)

At all campuses, students have access to many resources for individual learning and study. These include computer resource centres, current books, periodicals, films, videos and CD ROM and expert help in guiding students to use them properly.

SUMMER LANGUAGES FOR INTERNATIONAL STUDENTS

GBC Codes
English
4 Weeks: LT8370
5 Weeks: LT8390
6 Weeks: LT8420
French
3 Weeks: LT9320

Starting: Call the International Centre for start dates in July and August.

Apply to the International Centre at GBC.

Add some excitement to your summer by learning English or French at George Brown College in Toronto, Canada. This three- to six-week program combines language instruction with a full schedule of activities and field trips. Summer Languages introduces international students to either English or French, and to Canadian culture in Toronto. Students will visit Niagara Falls, SkyDome and the CN Tower, and participate in many other cultural and recreational events. Living accommodation for visiting students can be arranged in residences or in Toronto homes.

Call the International Centre for more information at (416) 867-2000 ext. 2115.

NOTE:
Special arrangements can be made for groups. Applicants must be 18 years of age or older.

ENGLISH AS A SECOND LANGUAGE INTERNATIONAL PROGRAM — INTERMEDIATE

GBC Code LT5480
Location: St. James Campus
12 Weeks
Apply to the International Centre at GBC

Starting: Various dates
Certification: Certificate
Summer classes, depending on start date

PREREQUISITES:
Proof of previous instruction in English as a foreign language.

For more information call the International Centre at (416) 867-2000 ext. 2115.

ABOUT THE PROGRAM:
This program is designed to allow international students to build on ESL knowledge gained in high school EFL classes abroad. The program comprises instruction in the four skill areas: listening, speaking, reading and writing. A graduate of this program is able to comprehend English spoken at a normal speed, communicate needs clearly in everyday situations, read brief articles and messages well enough to understand the main ideas, and complete forms and write short messages that a native speaker will have little difficulty in understanding. As well as classroom instruction, students are given time in language laboratories and computer rooms. Field trips to cultural and historical sites in the Toronto area are also provided.

ENGLISH AS A SECOND LANGUAGE INTERNATIONAL PROGRAM — ADVANCED

GBC Code LT5490
Location: St. James Campus
12 Weeks
Apply to the International Centre at GBC

Starting: Various dates
Certification: Certificate
Summer classes, depending on start date

PREREQUISITES:
ESL International Program — Intermediate or equivalent.

ABOUT THE PROGRAM:
This program allows international students the opportunity to further their English skills and to develop more sophisticated communication abilities. Included within instructional content is material dealing with Canadian social and economic issues.

COURSES	12 WEEKS
IL506	Advanced Listening for International Students
IL507	Advanced Speaking for International Students
IL508	Advanced Reading for International Students
IL509	Advanced Writing for International Students

For more information call the International Centre at (416) 867-2000 ext. 2115.

ENGLISH AS A SECOND LANGUAGE INTERNATIONAL PROGRAM — ACADEMIC

GBC Code LT5590
Location: St. James Campus
12 Weeks
Apply to the International Centre at GBC

Starting: Various dates
Certification: Certificate
Summer classes, depending on start date

PREREQUISITES:
ESL International Program — Advanced or equivalent.

ABOUT THE PROGRAM:
This intensive program is designed to prepare advanced ESL international students for success in post-secondary programs. Opportunities are provided for students to audit classes in other programs. Guest speakers also visit to give information and advice concerning choosing post-secondary courses.

COURSES	12 WEEKS
IL511	Listening for Academic Purposes
IL512	Speaking for Academic Purposes
IL513	Reading for Academic Purposes
IL514	Writing for Academic Purposes

For more information call the International Centre at (416) 867-2000 ext. 2115.

ENGLISH AS A SECOND LANGUAGE — INTERMEDIATE

GBC Code LT5400
Location TBA
12 Weeks
Apply to GBC

Starting: Various dates
Certification: Certificate
Summer classes, depending on start date

PREREQUISITES:
LINC certificate or passing grade on a test for basic English skills.

ABOUT THE PROGRAM:
This program allows students the opportunity to develop their basic English language skills. A graduate of this program is able to communicate needs and comprehend clearly in everyday situations. Oral performance is emphasized. Time is allotted in state-of-the-art language laboratories and computer rooms.

For more information, call the Registration Centre at (416) 867-2445 between 8 a.m. and 4:30 p.m.

ENGLISH AS A SECOND LANGUAGE — ADVANCED

GBC Code LT5430
Location TBA
12 Weeks
Apply to GBC

Starting: Various dates
Certification: Certificate
Summer classes, depending on start date

PREREQUISITES:
English as a Second Language — Intermediate or equivalent.

ABOUT THE PROGRAM:
This program provides those who already have good language abilities with more sophisticated communication and comprehension skills. Graduates may secure employment that utilizes previous training and experience in a variety of fields such as banking, clerical and business.

NOTE:
Graduates of this program may also take further instruction in order to prepare themselves for success in post-secondary programs. Call the Registration Centre for more information on English as a Second Language — Academic.

COURSES	12 WEEKS
LT506	Advanced Listening
LT507	Advanced Speaking
LT508	Advanced Reading
LT509	Advanced Writing

For more information, call the Registration Centre at (416) 867-2445 between 8 a.m. and 4:30 p.m.

LITERACY IN ENGLISH AS A SECOND LANGUAGE

GBC Code LT5420
Location TBA
24 Weeks
Apply to GBC

Starting: Various dates
Certification: Certificate
Summer classes, depending on start date

PREREQUISITES:
Lack of literacy. Most applicants are referred through Canada Employment Centres to the college for assessment before being assigned to the program.

ABOUT THE PROGRAM:
This full-time program provides students who are functionally illiterate in their native language with a level of literacy and general language skill required to meet minimal survival and maintenance demands. Those with demonstrated ability could enter a regular EASL program at approximately Level 3.

NOTE:
Human Resources Development Canada sometimes directly purchases seats in this program, reducing the number of seats open to fee-paying students.

For more information, call the Registration Centre at (416) 867-2445 between 8 a.m. and 4:30 p.m.

ENGLISH FOR SCIENCE AND HIGH TECHNOLOGY

GBC Code LT5410
Location TBA
12 Weeks
Apply to GBC

Starting: Various dates
Certification: Certificate
Summer classes, depending on start date

PREREQUISITES:
Most applicants are referred through Canada Employment Centres. All applicants must pass an entrance test and have Grade 12 or degrees or professional certificates in science and technology from country of origin.

ABOUT THE PROGRAM:
This program provides students who have a reasonably good knowledge of general English with the opportunity to apply their knowledge to understanding written and spoken English in a scientific and technological context. This comprehensive program is the most advanced, and one of the most well established, in Canada.

NOTE:
Human Resources Development Canada sometimes directly purchases seats in this program, reducing the number of seats open to fee-paying students.

COURSES	12 WEEKS
ENG582	Listening Comprehension
ENG583	Reading
ENG584	Writing
ENG585	Technical and Professional Communication Speaking

For more information, call Beth Legault at (416) 867-2000 ext. 2423 between 8:30 a.m. and 4:30 p.m.

LANGUAGE INSTRUCTION FOR NEWCOMERS TO CANADA (LINC)

GBC Code LT5440
Location TBA
24 Weeks
Apply to GBC

Starting: Various dates
Certification: Certificate
Summer classes

For more information, call the Registration Centre at (416) 867-2445 between 8 a.m. and 4:30 p.m.

PREREQUISITES:
All applicants must be referred by the A-LINC (Assessment-Language Instruction for New Canadians) program available at some YMCA offices. Contact the A-LINC hotline at (416) 763-4775 for an appointment. Eligibility requirements are determined by the Canada Employment and Immigration Commission. This program is not open to fee-paying students. Canadian citizens are not eligible for LINC training.

ABOUT THE PROGRAM:
This program provides English language instruction to help newcomers to Canada to ease their social, cultural and economic integration into Canada. This program is sponsored by Canada Employment and Immigration Commission.

LABOUR MARKET LANGUAGE TRAINING I (LMLT)

GBC Code LT5450
Location TBA
12 Weeks
Apply to GBC

Starting: Various dates
Certification: Certificate
Summer classes, depending on start date

For more information, call the Registration Centre at (416) 867-2445 between 8 a.m. and 4:30 p.m.

PREREQUISITES:
Most applicants are referred through Canada Employment Centres. Limited seats are available for fee-paying students. Applicants may be required to take an admissions test.

ABOUT THE PROGRAM:
This program is designed to provide adult learners of English as a second language with a level of fluency to allow them to obtain entry-level employment.

LABOUR MARKET LANGUAGE TRAINING II

GBC Code LT5460
Location TBA
12 Weeks
Apply to GBC

Starting: Various dates
Certification: Certificate
Summer classes, depending on start date

For more information, call the Registration Centre at (416) 867-2445 between 8 a.m. and 4:30 p.m.

PREREQUISITES:
Most applicants are referred through Canada Employment centres. Limited seats are available for fee-paying students. Applicants must take an admissions test.

ABOUT THE PROGRAM:
The goal of this program is to provide adult learners of English as a second language with a level of fluency to allow them to obtain entry level employment in the occupational clusters of business, hospitality, health care, and technology and trades.

LABOUR MARKET LANGUAGE TRAINING III

GBC Code LT5470
Location TBA
12 Weeks
Apply to GBC

Starting: Various dates
Certification: Certificate
Summer classes, depending on start date

For more information, call the Registration Centre at (416) 867-2445 between 8 a.m. and 4:30 p.m.

PREREQUISITES:
Most applicants are referred through Canada Employment Centres. Limited seats are available for fee-paying students. Applicants must take an admissions test.

ABOUT THE PROGRAM:
The goal of this program is to provide adult learners of English as a second language with a level of fluency for entry into skills training programs or further studies.

GENERAL ARTS AND SCIENCE

GBC Code AS1000
St. James Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7).

ABOUT THE PROGRAM:
This two-year program focuses primarily on communication skills, but includes a variety of optional and compulsory courses in philosophy, analytical thinking, science, human relations, mathematics, computers, media and culture, and Canadian Studies.

CAREER PROSPECTS:
There is increasing recognition from employers that communication skills, the ability to learn, adaptability and a general academic preparation are as important as, if not more so than, skill training. The General Arts and Science graduate has excellent preparation for careers in business, especially with businesses conducting their own training programs. As well, there are opportunities for graduates in general clerical and sales positions. Some General Arts and Science students may transfer to another post-secondary program or may move on to university at the end of the first year, since exposure to a general education may change expectations and broaden horizons.

This program is also offered on a part-time basis. Course content is subject to change.

ADVANCED STANDING:
Students who take this program may qualify for some exemptions in other programs at George Brown and other colleges and universities.

SEMESTER 1	16 WEEKS
COMM120	College English
LIBS132	Being Human: Self, Society and Meaning
MATH195/196	Mathematics
SOC102	Mass Media and Culture
PSY126	Career Studies
ONE OF:	
BIO117	Human Biology
SC129	Explorations in Science

SEMESTER 2	16 WEEKS
COMM124	Academic Writing
HUMN141	Philosophy: Search for Meaning
HUMN142	Canada in the 20th Century
ONE MATH ELECTIVE	
ONE SCIENCE ELECTIVE	
ONE OTHER ELECTIVE	

The electives came from those offered to post-secondary students at St. James campus.

SEMESTER 3	16 WEEKS
COMM126	Business Writing
COMM136	Job Search and Career Planning
EL5162	Canadian Literature
SOC205	Introduction to Sociology
ANY TWO ELECTIVES	

Two electives may be chosen from another GBC program or from the general electives list.

SEMESTER 4	16 WEEKS
EL5126	Speaking with Confidence
ONE OF:	
COMM202	Communications Project
HUMN203	Arts and Humanities Project
SC202	Natural Science Project
SOC200	Social Science Project

Any three electives may be chosen from another GBC program or from the general electives list.

For more information, call the Co-ordinator, Arts and Science, at (416) 867-2000 ext. 2306 between 9 a.m. and 5 p.m.

INTERESTED IN HEALTH-RELATED SCIENCES LIKE NURSING AND PRACTICAL NURSING?

Check out the Pre-Health Science program

on page 111

A

Dean:
Terry Dance-Bennink

Chairpersons:
Jo Lee
Community Outreach

Joan McKay
Career Development and Special Needs Office

Dana Peebles
Academic Skills Development

Barbara Taylor
Training and Employment Services

Norma Jean Taylor
Deaf Education Centre

Manager:
Deana Brydon
jobsOntario

Many people who aren't "typical" college students enrol at George Brown. Their career or family responsibilities prevent them from taking full-time programs, or they don't qualify academically. Some people face cultural or language or age barriers, and some people have disabilities. George Brown's Faculty of Access and Preparatory Studies responds to the needs of all these people with specially designed services and full- or part-time programs. Access programs and services bridge the gap between barriers and opportunities. They prepare people in transition for life-long learning through the development of basic generic skills — at work, in the community, at an educational institution and at home. Access programs are geared towards helping people qualify for career-related college programs or better jobs. The Career Development Centre offers a comprehensive assessment service to help people choose the right career. The faculty has particular expertise in developing co-operative, community-based programming, as well as programs for senior citizens, unemployed adults and disadvantaged youth. The faculty also includes programs and a wide range of support services for deaf and hard-of-hearing students and those with special needs.

As a centre for life-long learning, George Brown College is committed to helping students of all ages learn at their own pace, on campus or in the community. To provide access to the college, especially for non-traditional learners, a wide variety of preparatory and bridging programs are offered, including:

CAREER DEVELOPMENT CENTRE:
The centre offers an in-depth testing and career exploration service including interest, personality, aptitude and skills assessment. See page 13 for details.

CAREER EQUITY FOR YOUTH PROJECT:
The project, co-sponsored by the college and the Toronto Board of Education, has developed an anti-racist training kit for guidance, career and vocational counsellors. Call OISE at (416) 502-1262 for more information.

COLLEGE START/COLLEGE PREPARATION:
College Start helps students and adults to prepare for specific college programs. See page 27 for details.

COMPUTER SKILLS FOR THE NINETIES:
A full-time program for people on unemployment insurance or social assistance who require basic and intermediate skills in Lotus 1-2-3, WordPerfect 5.1 and MS-DOS. For more information call (416) 601-5100.

FORMATION DE BASE DE L'ONTARIO (F.B.O.):
Literacy, numeracy and computer literacy, as well as career planning and life skills, are offered in French to native French speakers. This program is for those who wish to upgrade their skills in order to enhance their employment possibilities or to prepare for further skills training. Child care and transportation allowances are available for qualified students. This program is tuition-free. For more information, call (416) 867-2000 ext. 2206.

FUTURES:
An OTAB program designed to give people between the ages of 15 and 24 an opportunity to gain the training and experience they need to become employable. Futures also offers counselling services and life-long learning to help disadvantaged young people develop the skills they need to find and keep a job. Trainees are hired by training employers or find work in a related field as a direct result of their training experience. Call (416) 867-2000 ext. 2220 for more information.

INTRODUCTION TO COLLEGE FOR STUDENTS WITH LEARNING DISABILITIES:
This three-day program for students with learning disabilities (Grade 11 or 12) introduces students to the realities and expectations of college life. Held in late spring, the program includes an introduction to the college, its campuses and its services, introduction to computers, a college-level lecture, study skills and self-advocacy workshops. For more information call the Special Needs Office at (416) 867-2000 ext. 2622.

JOB FINDING CLUBS:
Sponsored by the Toronto South Canada Employment management area, for people on unemployment insurance who require assistance in preparing and conducting a job search. This is a three-week full-time program. For more information, call (416) 601-5140.

JOBSONTARIO:
A joint project of the four Metro colleges, this provincially funded program is designed to provide jobs for unemployment insurance exhaustees and social assistance recipients with private sector employers. College staff work with the employers and new employees to develop training plans and to monitor training. For more information, call (416) 601-5121.

NATIVE PROGRAMS UNIT:
This initiative aims at facilitating access to college programs and services for Native people. Call (416) 867-2000 ext. 7350 for more information.

ONTARIO BASIC SKILLS (OBS):
A program designed to give adults the opportunity to upgrade basic literacy and numeracy skills, learn job search skills and become computer literate in order to prepare for employment or further skills training. OBS also offers counselling services and child care and transportation allowances for qualified students. Sponsored by the Ontario Ministry of Education and Training, the program is tuition-free. Call (416) 867-2000 ext. 7330 for more information.

PLANNING FOR EMPLOYMENT:
A program designed to assist clients of Metro Community and Social Services in preparing for direct entry to the workplace or for skills training. The basic program is four weeks long and includes vocational testing and assessment, career counselling and life skills. There is also an eight-week option that includes an orientation to the hospitality industry. For more information, call (416) 601-5100.

SCHOOL OF LABOUR:
A joint project of George Brown College and the Labour Council of Metro Toronto and York Region, the School of Labour links the programs and services of the college with unions and workers, and establishes joint training programs with the trade union movement. The School of Labour co-sponsors educational activities for college staff and students about the labour movement, holds an annual Labour Fair and promotes worker-centred training and education. Call (416) 867-2000 ext. 7361 for more information.

SENIORS' ACCESS INSTITUTE:
The institute sponsors a variety of day-time courses for older adults in the community and on campus; an annual summer Elderhostel for seniors across North America; an active George Brown College Seniors' Association; the Lifelong Literary Council with trained tutors available throughout the community; and senior volunteers who work in college programs and services. Call (416) 867-2000 ext. 7310 for more information.

ACCESS TO APPRENTICESHIP:
The co-ordinator provides information to equity groups on how to access training for skilled trades and helps clients find apprenticeship positions with employers/unions. The co-ordinator also provides a support system to the clients to help facilitate their success. For more information, call (416) 867-2000 ext. 7366.

BUSINESS EMPLOYABILITY SKILLS TRAINING:
Business Employability Skills Training is a unique learning program designed to prepare deaf and hard-of-hearing students for entry-level positions in the hearing workforce, as well as filling a business goal to hire more people with physical disabilities. Designed for adults who are unemployed, not job-ready and currently unable to find work in the hearing workforce, Business Employability Skills Training is one-third academic upgrading in English and math, one-third job preparation and professional development skills, and one-third business computer skills. All classes are offered in American Sign Language (ASL). The program was developed and is jointly sponsored by Human Resources Development Canada, the Bank of Montreal, the Canadian Hearing Society and George Brown College. Call (416) 956-7529 or 956-7349 (TTY) for more information.

LABOUR ADJUSTMENT PROJECT:
George Brown College, through the Labour Adjustment Project in the School of Labour, helps laid-off workers and labour adjustment committees in closures and downsizings. We offer group and individual vocational counselling, job search and resumé writing workshops, and information and referrals about training and retraining opportunities. For further information, call the School of Labour at (416) 867-2000 ext. 7361.

ACADEMIC UPGRADING FOR DEAF AND HARD-OF-HEARING ADULTS:
This course is designed to provide basic literacy and numeracy skills to deaf and hard-of-hearing adults who want to upgrade their English, mathematics and computer literacy. All courses are taught in American Sign Language (ASL). (See page 28.)

LAID OFF WORKER UPGRADING PROGRAM (LOWUP):
Laid-Off Worker Program helps laid-off workers to prepare for skills training programs. (See page 30.)

COMMUNITY-BASED TRAINING:
More than 25 community-based training projects across the city are affiliated with George Brown through its Community Outreach Department. Students with special needs, women, trade-unionists, Native people, the unemployed and people of diverse racial and cultural groups can learn in a variety of settings and receive college credits. For more information, please contact the agencies directly.

Community-based training partners include:

- Alexandra Park Learning Centre: Basic Literacy, (416) 591-7384
- Alternative Computer Training for the Disabled (ACT): Microcomputers, (416) 488-4076
- Canadian National Institute for the Blind (CNIB): Business Office Skills and Microcomputers, (416) 480-7025
- Chinese Information and Community Services and Sing Tao Newspaper: Chinese Translation, (416) 598-2022
- Dixon Hall: Secretarial Training and Employment (STEP), (416) 864-1511
- East End Literacy: Basic Literacy, (416) 968-6989
- Goodwill Industries of Toronto: Microcomputers (CREST), (416) 362-4711
- Goodwill Industries of Toronto: Job Skills Development (Work-On-Track), (416) 293-5070
- Immigrant Women's Job Placement Centre: Computer-Aided Design and Drafting (CADD), (416) 488-0084
- Jewish Vocational Service of Metropolitan Toronto: Microcomputers, (416) 787-1151
- Metro Labour Education Centre: Basic Literacy and Numeracy, English in the Workplace, Labour Studies and Labour Adjustment Programs, (416) 345-9312
- Native Canadian Centre: Aboriginal Employment Counselling and Career Planning, (416) 964-9087
- Native Skills Centre: Microcomputers and Office Management and Administration, (416) 581-1392
- Ontario March of Dimes: (Toronto and Thunder Bay), Microcomputers, (416) 445-0149; (807) 473-8448
- Parkdale Project Read: Basic Literacy, (416) 531-6308
- St. Christopher House: Basic Literacy, (416) 539-9000
- Toronto Alfa Centre: Basic Literacy, (416) 652-3652
- Woodgreen Community Centre of Toronto: Computer-Aided Design and Drafting (CADD), (416) 469-5211
- Young Women's Christian Association (YWCA): Bridging and Upgrading, (416) 961-8100

For more information, call (416) 867-2000 ext. 7355.

LABOUR PROGRAMS:
More than 600 trade-unionists enrol annually in a Labour Studies Certificate program, offered in union halls and centres across the city and accredited by the college. Several hundred more participate in English in the Workplace, Adult Basic Education and Labour Adjustment programs delivered by the Metro Labour Education Centre. The Community Outreach Department offers curriculum and program development assistance, conducts program evaluation jointly with the centre and ensures college certification of all graduates.

Call (416) 345-9312 for more information.

COLLEGE ORIENTATION FOR DEAF AND HARD-OF-HEARING STUDENTS

GBC Code HS5040
St. James Campus
1 Week
Apply to GBC

Starting: August

PREREQUISITES:
Acceptance into any full-time college program.

ABOUT THE PROGRAM:
The College Orientation week starts in late August and is designed to help deaf and hard-of-hearing students become familiar with George Brown College and Metro Toronto. Students will be given an in-depth orientation to services provided by Services for deaf and hard-of-hearing students and encouraged to think about the services they may require once they are in their program. Students will also learn how to function in a mainstream college environment.

For more information, call Len Charbonneau at (416) 867-2000 ext. 2065 (voice) or (416) 864-0535 (TTY).

ACADEMIC UPGRADING FOR DEAF AND HARD-OF-HEARING ADULTS

GBC Code AS5510
St. James Campus
32 Weeks
Apply to GBC

Starting: September
No summer classes

PREREQUISITES:
- Functional Level Testing
- Sign Communication Proficiency Testing

ABOUT THE PROGRAM:
George Brown College is a leader in education and educational services for deaf and hard-of-hearing people. This is the only program of its kind in Metro Toronto, with all courses taught in American Sign Language (ASL). The program is for those deaf and hard-of-hearing students who want to upgrade their English, math and computer literacy skills. All of these courses are specially geared to the needs and interests of deaf and hard-of-hearing students.

This program is unique in Metro Toronto.

SEMESTER 1	16 WEEKS
MATH519	Mathematics
ENG516	English
CMPU598	Computer Literacy

SEMESTER 2	16 WEEKS
MATH529	Mathematics
ENG529	English
CMPU598	Computer Literacy

For further information, call (416) 956-7313 (TTY) or (416) 867-2000 ext. 7370 (voice).

ACADEMIC UPGRADING 1, 2, 3 AND 4

GBC Code AS551
St. James Campus
3 Semesters
Apply to GBC

Starting: Continuous intake and semestered classes
Summer classes may be offered

PREREQUISITES:
Admissions test.

ABOUT THE PROGRAM:
The Upgrading program is designed for adults who wish to upgrade for entrance to skill training programs or to College Start (AS557), which prepares candidates for post-secondary programs. Candidates are admitted on a semestered or continuous intake basis. After an assessment, students in upgrading are placed in an appropriate individualized program consisting of one or more of the following courses.

COURSES Students will choose one to five courses.	
MATH519, 529, 531, 513, 523	Mathematics
ENG516,529,534,513,523	English
SC530	Science
BIO513	Biology
CHEM513, 523	Chemistry
PHY513, 523	Physics
CMPU598	Computer Literacy

For more information, call the Academic Skills Department at (416) 867-2000 ext. 7330 between 9 a.m. and 4 p.m.

COLLEGE START/COLLEGE PREPARATION
(BUSINESS, TECHNOLOGY, FASHION, HOSPITALITY AND HEALTH SCIENCES)

GBC Code AS550
St. James Campus
3 Semesters (16 weeks)
Apply to GBC

Starting: September, January, May
Summer classes may be offered

PREREQUISITES:
Upgrading Level 2 or Grade 8 equivalent for College Start Level 3 programs. Upgrading Level 3 or Grade 10 equivalent for College Start Level 4 programs. Admissions test.

ABOUT THE PROGRAM:
College Start helps to prepare students for college programs. It gives them upgrading that is directly related to other college program requirements for a variety of post-secondary or skills programs. College Start programs include preparation for careers in business, technology, fashion, hospitality and health science programs. This program emphasizes career-specific upgrading in English, mathematics and science. In addition, each College Start program also offers modules in computer literacy, study skills and career planning. Students also have the opportunity to audit courses in the area of their choice through the college. Successful graduates are guaranteed admission into a college-level program at George Brown College — according to the guidelines of the Registrar.

COURSES	16 WEEKS
ENG523	English
SC530	Science
MATH523	Mathematics
BIO513	Biology
ENG513	English
CHEM513, 523	Chemistry
MATH513	Mathematics
PHY513,523	Physics
CMPU598	Computer Literacy

For more information, call the Academic Skills Department at (416) 867-2000 ext. 7330 between 9 a.m. and 4 p.m.

LAID-OFF WORKER UPGRADING PROGRAM (LOWUP)

GBC Code AS551
St. James Campus
3 Semesters
Apply to GBC

Starting: Contact department for dates
Summer classes may be offered

PREREQUISITES:
Admissions test.

ABOUT THE PROGRAM:
The Laid-Off Worker Upgrading program is designed for adults who want to upgrade for entrance to skills training programs. Candidates must be laid-off workers and can be referred by the staff of George Brown College's Labour Adjustment Project.

Candidates are admitted on a staggered continuous intake. After an assessment, students are given an appropriate individualized timetable consisting of English, mathematics, employability skills and computer literacy.

COURSES:
Students will choose one to three courses:

MATH519,529,531,513,523	Mathematics
ENG529,534,513,523	English
CMPU598	Computer Literacy

For more information, call the Academic Skills Department at (416) 867-2000 ext. 7330 between 9 a.m. and 4 p.m.

VOCATIONAL ORIENTATION

GBC Code AP5780
St. James Campus
9 Weeks
Apply to GBC

Starting: April, September, November, February

PREREQUISITES:
Applicant interviews will be conducted. Applicants must have completed Grade 10 at the general level or above or have mature student status (see page 7). Grade 10 English is recommended.

ABOUT THE PROGRAM:
Through a combination of vocational testing, individual and group career counselling and placements, this program assists adults who are vocationally confused. Students may audit program placements at George Brown and other Toronto area colleges and non-college programs.

The program includes a variety of career planning and life skills classes designed to increase students' self-awareness and self-confidence; develop their career decision-making skills and ability to research potential job markets and course options; and learn job-search skills. A computer literacy and math review is included.

Graduates enter a wide variety of training programs or move directly into employment in their chosen career.

NOTE:
Human Resources Development Canada purchases seats in this program, reducing the number of seats open to fee-paying students.

COURSES	9 WEEKS
IPO500	Group Vocational Exploration and Assessment
IPO501	Life Skills
IPO503	Individual Vocational Research and Assessment
IPO504	Vocational and Personal Counselling
IPO505	Academic Preparation — Mathematics
PRGM528	Computer Literacy

For more information, call the program counsellor at (416) 867-2000 ext. 2193 between 9 a.m. and 4 p.m.

CAREER CHANGE

GBC Code AP555
St. James Campus
10 Weeks
Apply to GBC

Starting: May, September, January
Certification: Certificate
No summer classes

PREREQUISITES:
Interview. Applicants must be 40 years of age, receiving unemployment insurance and be referred directly by a Canada Employment counsellor.

ABOUT THE PROGRAM:
The program assists mid-life adults who have experienced job displacement to relocate in the job market. Unemployed mature workers may take this federally sponsored 10-week program. They will participate in individual career counselling, small group support, career research and exploration, a career speakers series highlighting employer participation, effective résumé and interview preparation, and work shadowing possibilities.

CAREER PROSPECTS:
Career opportunities will relate directly to the skill levels of the participants. The emphasis of the program is on preparation for direct entry to employment.

COURSES	10 WEEKS
CC500	Support Group
CC501	Vocational Exploration
CC502	Job Search Techniques
CC503	Community Resources
PGRM125A	Computer Skills

For more information, call program counsellor at (416) 867-2000 ext. 2627 between 9 a.m. and 4 p.m.

COLLEGE VOCATIONAL PROGRAM

GBC Code CR1000
St. James Campus
32 Weeks
Apply to OCAS

Starting: September
Certification: Certificate
No summer classes

PREREQUISITE:
Ontario Secondary School Diploma with the majority of credits at the basic level, or mature student status (see page 7). Applicants require a pre-admission interview.

ABOUT THE PROGRAM:
This job-readiness program is designed to meet the unique educational and vocational needs of people who would not normally consider or qualify for entry into a traditional post-secondary program. It is an individualized, supportive program to help bridge the gap for students who have graduated from high school and who are having difficulty finding appropriate and meaningful work. It will offer extensive assessment through the use of several vocational tools. In addition, students participate in career planning, communication and life skills training, and work experience placements in the field of their choice. Students utilize the computer lab for keyboarding skills and the preparation of résumés and covering letters. Students enrolled in this program are eligible for loans and grants.

CAREER PROSPECTS:
Graduates can expect improved career prospects in the field of their choice.

SEMESTER 1	16 WEEKS
CD100	Life Skills I
CD102	Communications Skills I
CD104	Mathematics Skills I
CD106	Fitness I
CD108	Vocational Skills/Assessment I

SEMESTER 2	16 WEEKS
CD101	Life Skills II
CD103	Communications Skills II
CD105	Mathematics Skills II
CD107	Fitness II
CD109	Vocational Skills/ Work Placements II

For more information, call Amber Stiebel or Keith Nickson at (416) 867-2000 ext. 2503 between 9 a.m. and 4 p.m.

CAREER AND WORK COUNSELLOR

GBC Code CA1010
St. James Campus
64 Weeks (4 semesters)
Apply to OCAS

Starting: Contact the department
Certification: Diploma
No summer breaks

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above the general level) or equivalent or mature student status (see page 7). Grade 12 math and English. Applicants must submit a letter of personal goals and intent, provide references and attend a structured interview.

BACKGROUND:
This program is suitable for people working in career counselling or a related field, people who wish to make a career change and high school graduates. Courses in sociology, psychology and computers would be helpful.

ABOUT THE PROGRAM:
People who want to work in the field of career counselling — or people who are already working in a related field but lack the appropriate education — will be interested in this program. Students are exposed to both individual and group career counselling theory and practice and they are prepared for a variety of employment settings from corporate career services to community agencies.

Through a combination of theory and supervised placements, students learn how to deliver career counselling services that are professional, informed and current. A career and work counsellor advises and counsels others on the topics of career planning, career change, career revision or school-to-work transition that could be a result of injury, illness, inappropriate career choice or job loss. Other topics covered include job search preparation, stress management, career management, human rights legislation and leisure-time planning. People who work in this field must be informed about current educational and occupational trends, make appropriate referrals and utilize vocational assessment tools.

The career-work focus of this program reflects the rapidly changing field of career counselling and addresses the special, diverse requirements of the community in Metro Toronto and vicinity. The curriculum was specifically designed and written by several renowned career counselling specialists from industry and from George Brown College who shared in all aspects of program development.

This program is unique in Metro Toronto.

CAREER PROSPECTS:
Graduates may find work as a career counsellor, career assistant, worker rehabilitation assistant, corporate career planner, job search facilitator, employment counsellor, vocational assessor, career specialist or career information service provider.

SEMESTER 1	16 WEEKS
COMM120	Communications 120
CD112	Overview: Career and Work Counselling
CD113	Work and Life: A Career Counselling Perspective
CD114	Individual Career Counselling: Skills and Process I
CD115	Stages of Adult Development: A Career Counselling Perspective
CD116	Career Development Theory I
CD117	Practicum Preparation
Electives: Introduction to Psychology or Introduction to Microcomputers	

SEMESTER 2	16 WEEKS
CD118	Assessment in Career Counselling: Statistics and Tests
CD119	Career Development Theory II
CD120	Individual Career Counselling Skills and Process II
CD121	Resources in the Field (Career Information Systems)
CD122	Career and Work Counselling with Diverse Populations
CD123	Field Integration
CD124	Practicum: 2 days per week

SEMESTER 3	16 WEEKS
CD210	Group Career Counselling
CD211	Theory and Practice of Job Search
CD212	Career and Work Equity Issues
CD213	Managing Transition and Change: A Career Counselling Perspective
CD214	Assessment in Career Counselling: Tests, Interpretation and Placement
CD215	Field Integration
CD216	Practicum: 2 days per week

SEMESTER 4	16 WEEKS
CD217	Special Topics (i.e., Creative Career Planning Techniques)
CD218	Theory and Practice of Job Search with Special Needs Populations
CD	Field Integration
CD	Practicum: 3 days per week
CD	Field Integration: Assessment

For more information, call the Career Development Centre at (416) 867-2000 ext. 2207 between 8:30 a.m. and 4:30 p.m.

FACULTY OF BUSINESS

Dean:
James Ross

Chairpersons:
James Drennan
Pearl Hazen
Yvonne Snider

B

BUSINESS

The Faculty of Business at George Brown College offers an array of career-oriented programs in downtown Toronto — just blocks away from the heart of Canadian business. All Faculty of Business programs have been developed in partnership with active advisory committees and professional associations from Toronto's business community.

To be assured of success in a Faculty of Business program, applicants require a strong background in communications and mathematics. The academic prerequisite for most business programs is an Ontario Secondary School Diploma (at or above the general level, with Grade 12 mathematics and English). Mature applicants who lack the academic prerequisities may be admitted on the basis of equivalent proficiency in English and mathematics. (See page 7.)

At the beginning of each semester, all students are assessed in English and mathematics to identify those needing remediation.

Secondary school graduates with advanced standing, such as OACs, may be eligible for credits in some Faculty of Business programs. Mature students may be eligible for credits based on work experience related to their program. Graduates of Faculty of Business programs may apply credits towards selected degree programs at York University and Ryerson. In addition, professional associations also recognize college credits for advanced standing in their programs. For more information, call the Faculty of Business at (416) 867-2135.

BUSINESS ADMINISTRATION PROGRAMS

COMMON FIRST SEMESTER

George Brown's Faculty of Business offers a cluster of two- and three-year Business programs with a common first semester. This allows a student to take a variety of business courses in the first semester and then choose an area of specialty.

Common courses are: accounting; information systems; marketing; distribution management; language and communication; and business mathematics.

TWO-YEAR DIPLOMA PROGRAMS	THREE-YEAR DIPLOMA PROGRAMS	ONE-YEAR POST-DIPLOMA PROGRAMS
Accounting	Accounting	Sport and Event Marketing
Business — Management Studies	Marketing	International Trade
Information Systems Marketing		Small Business
Distribution Management		
Property Management		

Graduates of the two-year Accounting or Marketing programs may be admitted directly into the third year of the corresponding three-year program if they satisfy academic requirements. Three-year programs examine business organizations as a whole.

POST-DIPLOMA STUDIES

Graduates of diploma programs in George Brown's Faculty of Business may qualify for advanced standing or exemptions with professional associations and universities. Program co-ordinators will supply more information.

In all Business Administration programs, students select elective courses as specified in the program outlines on the following pages. In each semester some of the following electives are offered:

EC107	Introduction to Economics
ACC102	Accounting for Decision Making
ACC225	Management Accounting
BUS116	Travel Planning I
BUS121	Women in Business
BUS133	Microcomputers in Business
EC210	Economics I
EC211	Economics II
ELS126	Speaking with Confidence
ELS161	Introduction to Journalism
ELS162	Introduction to Canadian Literature
ELS164	Reading Effectively
FR100	Conversational French
FR101	Conversational French — Intermediate
FR102	Conversational French — Advanced
LAW200	Commercial Law
MATH125	Mathematics of Merchandising
MATH214	Statistics I
MATH253	Optimization
MATH255	Quantitative Methods I
MATH267	Quantitative Methods II
PD103	Warehousing Management
PD105	Inventory Control I
PD204	Industrial Purchasing
PSY106	Human Relations
PSY161	Introductory Psychology
PSY162	Social Psychology
PSY211	Human Resources Development
SBM166	Small Business Management
SOC126	Political Sociology
SOC206	Sociology of Women
BUS282	Business Ethics
MARK109	Sports Marketing
ELS124	Science Fiction
COMM113	Peer Learning
HUMN144	World Religions

NOTE: Students enrolled in a major — for example, marketing — may not choose an elective in that major. If clarification is required on the appropriate choice of elective, students should see their program co-ordinator.

BUSINESS — ACCOUNTING

B

BUSINESS

GBC Code BU1450
St. James Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September, January
Certification: Diploma
No summer classes

PREREQUISITES:

Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 English and mathematics.

ABOUT THE PROGRAM:

The courses included in this program provide a valuable preparation for students interested in accounting occupations in business and industry. They also offer preparatory training for students interested in continuing their studies to receive a professional accounting designation.

CAREER PROSPECTS:

Accountants are required in every facet of our society. Graduates from this program may find career opportunities in manufacturing, merchandising, finance, government, public institutions, recreation and service organizations.

Accounting firms tend to prefer graduates with leadership potential, self-confidence, comprehensive accounting skills and the ability to communicate effectively. The new graduate may obtain employment in a training program that will provide a wide range of experience in various sections of the firm's accounting department, such as accounts payable, accounts receivable, payroll, cost accounting, etc.

Graduates may also be employed in positions less concerned with accounting, but where their specialized training assists them in solving the many problems they will encounter in the other operational functions of business. The federal and provincial governments, with their complex regulations and taxing systems, seek college accounting graduates for employment in the areas of financial management and taxation.

ADVANCED STANDING:

Students who successfully complete this program may enter directly into the third year (Semester 5) of the Business Administration — Accounting (BU1096) program. They may also be exempted from up to four credits in Atkinson College at York University.

Graduates may obtain advanced standing in the C.G.A. (Certified General Accountants) program and with universities.

SEMESTER 1	16 WEEKS
ACC100	Introduction to Accounting I
IS115	Introduction to Information Systems
MARK100	Introduction to Marketing
MATH114	Business Mathematics
PD100	Introduction to Distribution Management
COMM120	College English

SEMESTER 2	16 WEEKS
ACC117	Introduction to Accounting II
MATH115	Mathematics of Finance II
ELECT000	Elective
LIBS132	Being Human: Self, Society and Meaning
COMM126	Business Writing and Options

SEMESTER 3	16 WEEKS
ACC200	Financial Accounting I
ACC202	Management Accounting I
ACC220	Accounting Information Systems I
ELECT000	Elective
COMM131	Report Writing and Options

SEMESTER 4	16 WEEKS
ACC203	Financial Accounting II
ACC204	Management Accounting II
ACC205	Auditing
ACC222	Accounting Information Systems II
ELECT000	Elective

SEMESTERS 5 AND 6 (THIRD YEAR OPTION)
See the Business Administration Accounting (BU1096) program.

For more information, call (416) 867-2000 ext. 2145 or the Faculty of Business at (416) 867-2135 between 8:30 a.m. and 4:30 p.m.

ACCOUNTING

GBC Code BU2000
St. James Campus
52 Weeks (continuous)
Apply to OCAS

Starting: Various start dates
Certification: Diploma
Summer classes

NOTE:
This is a continuous 52-week program. The content of major subjects is identical to Business — Accounting; however, students complete the program in **one** year. Start dates vary because the availability of this program is related to government sponsorship. Some fee-paying students are accepted along with government-sponsored students.

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 English and mathematics.

ABOUT THE PROGRAM:
This 52-week program enables students to analyse and systematically record business transactions and events of a financial nature, and to record, summarize, report and interpret the results.

CAREER PROSPECTS:
Graduates may find employment with public accounting firms, in accounting capacities with large and small retail and wholesale businesses, or as cost analysts with manufacturers. The federal and provincial governments, with their complex regulations and taxing systems, seek college accounting graduates for employment in the areas of financial management and taxation.

ADVANCED STANDING:
Graduates may be admitted to the third year of Business Administration — Accounting (BU1096) if specified academic requirements have been satisfied. (See program co-ordinator for details.) Graduates of this program (BU2000) may be exempted from up to four credits in Atkinson College at York University.

Graduates may obtain advanced standing in the C.G.A. (Certified General Accountants) program and with universities.

SEMESTER 1	12 WEEKS
MATH114	Business Mathematics
ACC100	Introduction to Accounting I
IS115	Introduction to Information Systems
MARK100	Introduction to Marketing
PD100	Introduction to Distribution Management
COMM120	College English

SEMESTER 2	14 WEEKS
MATH115	Business Mathematics
LIBS702	Being Human: Self, Society and Meaning
ACC117	Introduction to Accounting II
LAW200	Commercial Law
COMM126	Business Writing and Option

SEMESTER 3	12 WEEKS
ACC200	Financial Accounting I
ACC202	Management Accounting I
ACC220	Accounting Information Systems I
MATH214	Statistics I
COMM131	Report Writing and Option

SEMESTER 4	14 WEEKS
ACC203	Financial Accounting II
ACC204	Management Accounting II
ACC205	Auditing
ACC222	Accounting Information Systems II
BUS282	Business Ethics

For more information, call (416) 867-2000 ext. 2145 or the Faculty of Business at (416) 867-2135 between 8:30 a.m. and 4:30 p.m.

PART-TIME AND EVENING COURSES
Call 867-2464 or 1-800-263-8995

BUSINESS ADMINISTRATION — ACCOUNTING

B

BUSINESS

GBC Code BU1096
St. James Campus
3 Years (6 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 English and mathematics.

Graduates of Business — Accounting (BU1091 and BU2000) may be admitted directly into Semester 5 of this program if they satisfy academic requirements. Applicants having credentials from other colleges should request advanced standing.

ABOUT THE PROGRAM:
Specialized accounting training is balanced with courses designed to provide students with managerial skills so that upon graduation they may move into supervisory positions. This program is recommended primarily for those who wish to specialize in accounting or who expect to make extensive use of accounting in their careers. In addition to learning manual systems, students are trained in the use of microcomputers and evaluate a variety of software applications throughout the program. This comprises 20 per cent of classroom time during the third year.

CAREER PROSPECTS:
Graduates may find employment in supervisory accounting positions and apply their training and skills in areas such as financial accounting, auditing, financial analysis and management accounting. Many are employed by public accounting firms or by government. Some provide accounting services to small businesses on an entrepreneurial basis.

ADVANCED STANDING:
Accounting graduates may obtain advanced standing in the C.G.A. (Certified General Accountants) program and with universities.

Students who successfully complete this program may be exempted from up to seven credits in Atkinson College at York University.

In addition, students who successfully complete this program may receive full credit for their three-year diploma at Northwood University in Midland, Michigan. Students can complete a four-year Bachelor or Business Administration degree in one academic year.

Further details can be obtained from the program co-ordinator or department chair.

SEMESTER 1	16 WEEKS
ACC100	Introduction to Accounting I
IS115	Introduction to Information Systems
MARK100	Introduction to Marketing
MATH114	Business Mathematics
PD100	Introduction to Distribution Management
COMM120	College English

SEMESTER 2	16 WEEKS
ACC117	Introduction to Accounting II
ELECT120	Communications
MATH115	Business Mathematics
LIBS132	Being Human: Self, Society and Meaning
ELECT000	Elective
COMM126	Business Writing and Options

SEMESTER 3	16 WEEKS
ACC200	Financial Accounting I
ACC220	Accounting Information Systems I
ACC202	Management Accounting I
ELECT000	Elective
COMM131	Report Writing and Options

SEMESTER 4	16 WEEKS
ACC203	Financial Accounting II
ACC204	Management Accounting II
ACC205	Auditing
ACC222	Accounting Information Systems II
ELECT000	Elective

SEMESTER 5	16 WEEKS
BUS320	Organizational Behaviour Theory
BUS321A	Financial Management
BUS326A	Faculty Directed Research I
ACC300	Management Accounting
ACC302	Internal Auditing
ACC306	Advanced Accounting I

SEMESTER 6	16 WEEKS
BUS334	Managing Organizational Behaviour
BUS324	Canadian Business Policy and Strategy
BUS327A	Faculty Directed Research II
ACC301	Taxation
ACC303A	Finance
ACC307	Advanced Accounting II

For more information, call (416) 867-2000 ext. 2145 or the Faculty of Business at (416) 867-2135 between 8:30 a.m. and 4:30 p.m.

BUSINESS — DISTRIBUTION MANAGEMENT

GBC Code BU1470
St. James Campus
2 Years (4 semesters)
OCAS Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 English and mathematics.

ABOUT THE PROGRAM:
The lifeline of many organizations, distribution management makes a significant contribution to market competitiveness and economic efficiency. It means ensuring that the right products are in the right place at the right time and at the right cost – an area of customer service that has become increasingly important, especially with the emerging growth in international trade.

Distribution Management is a comprehensive two-year program incorporating classroom instruction with guest speakers, off-site visits and a two-week work experience in the final semester.

Students learn how businesses operate locally, nationally and internationally, as they prepare for careers in customer service, inventory control, purchasing, warehousing, materials handling and integrated logistics.

We help students to develop their "people skills" and provide them with a solid understanding of management skills, case applications, computer applications and research techniques. We are at the forefront of Electronic Data Information technology applications, working with the EDI Council of Canada.

CAREER PROSPECTS:
The demand for distribution management specialists is high, especially with the increase in foreign trade. Career opportunities exist in a variety of economic sectors such as manufacturing, import/export, transportation, packaging, distribution systems design and government operations service sector. The two-week job experience gives students practical experience and an opportunity to explore particular career paths.

ADVANCED STANDING:
Students who successfully complete this program may be exempted from up to four credits in Atkinson College at York University.

SEMESTER 1	16 WEEKS
ACC100	Introduction to Accounting I
IS115	Introduction to Information Systems
MARK100	Introduction to Marketing
MATH114	Business Mathematics
PD100	Introduction to Distribution Management
COMM120	College English

SEMESTER 2	16 WEEKS
MATH214	Statistics I
PD103	Warehousing Management
PD204	Industriol Purchasing
ELECT000	Elective
LIBS132	Being Human: Self, Society and Meaning
COMM126	Business Writing

SEMESTER 3	16 WEEKS
PD202	Distribution Management Systems — Management I
PD203	Traffic and Transportation Management I
PD105	Inventory Control I
ELECT000	Elective
LAW104	Distribution Management Law
COMM131	Report Writing

SEMESTER 4	16 WEEKS
PD205	Distribution Management Systems — Management II
PD206	Inventory Control II
PD207	Traffic and Transportation Management II
PD208	Import/Export Procedures
PD209	International Trade
ELECT000	Elective

For mare information, call Clive Connon at (416) 867-2000 ext. 2140 between 8:30 o.m. and 4:30 p.m. or the Faculty of Business at (416) 867-2135.

YOUR PROGRAM MAY OFFER A BURSARY OR SCHOLARSHIP.
Contact your Program Coordinator or the Financial Assistance Office to find out.

BUSINESS — MANAGEMENT STUDIES
FORMERLY BUSINESS (GENERAL)

B

BUSINESS

GBC Code BU1480
St. James Campus
2 Years (4 semesters)
OCAS Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 English and mathematics.

ABOUT THE PROGRAM:
This program is designed for students who prefer to develop skills in a variety of business disciplines. This program focuses on the concept of the business generalist and includes practical, job-related business studies from the fields of accounting, computer applications, customer relations, purchasing, inventory control and general management. Students who discover a particular interest and aptitude for specialized studies may transfer, after first semester, to Accounting, Information Systems, Marketing or Distribution Management.

CAREER PROSPECTS:
Some of the employers who hire Management Studies graduates are small businesses who need employees with the flexibility to handle a variety of responsibilities. Other employers have unique job requirements — they have to provide specialized training but they prefer to hire business graduates who have shown that they have the interest and maturity to succeed. With experience an ambitious and capable graduate should move into a supervisory or management position.

ADVANCED STANDING:
Students who successfully complete this program may be exempted from up to four credits in Atkinson College at York University.

SEMESTER 1	16 WEEKS
ACC100	Introduction to Accounting I
IS115	Introduction to Information Systems
MARK100	Introduction to Marketing
MATH114	Business Mathematics
PD100	Introduction to Distribution Management
COMM120	College English

SEMESTER 2	16 WEEKS
MARK101	Professional Presentations
MATH214	Statistics I
PD204	Industriol Purchasing
ACC102	Accounting for Decision Making
LIBS132	Being Human: Self, Society and Meaning
COMM126	Business Writing and Options

SEMESTER 3	16 WEEKS
ACC225	Management Accounting
MAN200	General Management I
MATH125	Mathematics of Merchandising
PD105	Inventory Control
ELECT000	Elective
COMM131	Report Writing and Options

SEMESTER 4	16 WEEKS
BUS140	Microcomputer Applications
SBM166	Small Business Management
MAN203	General Management II
MARK204	Public Relations & Publicity
PD209	International Trade
ELECT000	Elective

For mare information, call Clive Connon at (416) 867-2000 ext. 2140 between 8:30 o.m. and 4:30 p.m. or the Faculty of Business at (416) 867-2135.

NEED SOME CAREER ADVICE?
see page 3

BUSINESS — INFORMATION SYSTEMS

GBC Code BU1460
St. James Campus
3 Years (6 semesters)
Apply to OCAS

Starting: September, January
Certification: Diploma
No summer classes
(Pending Ministry approval)

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 English and mathematics.

ABOUT THE PROGRAM:
Job opportunities for three-year graduates are usually at the level of trainee. Advancement to more senior levels in application development, support or programming usually occurs after suitable experience. Additional institutional training is likely to be needed for advancement to systems analysis.

CAREER PROSPECTS:
Application Development — Develop computer-based systems to generate information for managers in all parts of the company.

End-User Support — Work with users of information, helping them to understand and use computer-based information systems.

Programming — Write computer programs to solve problems related to management of information in business.

Computer Operation — Working from a schedule of jobs to be run, monitor the operation of computer systems and follow written instructions for dealing with exceptional conditions.

ADVANCED STANDING:
Students who successfully complete this program may be exempted from some credits in Atkinson College at York University.

SEMESTER 1	16 WEEKS
ACC100	Introduction to Accounting
COMM120	College English
MATH114	Business Mathematics
LIBS132	Being Human: Self, Society and Meaning
COMP110	Introduction to Information Systems
COMP111	Microcamputer Applicatians I

SEMESTER 2	16 WEEKS
COMM126	Business Writing
MATH116	Mathematics for EDP
GENED	General Educatian
COMP120	Programming in C
COMP121	Micracamputer Applications II
COMP122	Management Information Systems

SEMESTER 3	16 WEEKS
COMM131	Report Writing
GENED	General Educatian
MATH214	Statistics I
COMP230	Advanced C Programming
COMP231	Database Management Systems
COMP232	Systems Analysis and Design I

SEMESTER 4	16 WEEKS
GENED	General Educatian
COMP240	Interactive Nan-sequential Programming
COMP241	Database Management Application Development
COMP242	Systems Analysis and Design II
ECON	Ecanamics
ACC	Accounting

SEMESTER 5	16 WEEKS
GENED	General Educatian
COMP350	Object-oriented Programming
COMP351	Distributed Application Development
COMP352	Networking and EDI
COMP353	Operating Systems

SEMESTER 6	16 WEEKS
GENED	General Educatian
COMP360	GUI Applicatian Development
COMP361	Client-Server Tronsactian Processing
COMP362	Network Administration
COMP363	Imaging and Multimedio

For mare information, call (416) 867-2000 ext. 2144 ar the Faculty of Business at (416) 867-2135 between 8:30 a.m. and 4:30 p.m.

BUSINESS — MARKETING

GBC Code BU1490
St. James Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September, January
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 English and mathematics.

ABOUT THE PROGRAM:
Highly concentrated in marketing subjects, this program is designed to prepare the student for a career in marketing and for a career path to senior management. For the first two years, the program concentrates on marketing operations and strategies. Third-year students are exposed to the broad concerns of management; they study additional marketing subjects and they complete a year-long practical assignment, usually consulting with outside organizations to help solve their marketing problems. The program makes extensive use of case studies, business projects, written reports, video-taped presentations, computerized business simulations and various computer programs that businesses use to aid analysis and decision making. Students are encouraged to participate in the Marketing Club (a chapter of the International American Marketing Association) and in marketing competitions against other colleges and universities. Since 1974, George Brown College students have won first prize in thirteen industry-sponsored marketing competitions and their AMA chapter has won many international awards.

CAREER PROSPECTS:
Graduates find entry-level positions with a wide variety of organizations including manufacturers, wholesalers and retailers, and service industries. In industrial marketing firms, graduates usually start as sales trainees or sometimes as sales analysts, and move upward through the sales and marketing departments, or in marketing departments of smaller and medium-sized manufacturers as brand assistants and/or researchers. Some students obtain entry-level positions in marketing research or advertising agencies, and quickly move up to operational levels where their analytical and decision-making skills are utilized.

ADVANCED STANDING:
Graduates from this program are admitted directly into Semester 5 of the three-year program leading to the Diploma in Business Administration — Marketing if they satisfy the academic requirements. Students who successfully complete this program can be exempted from up to four credits at Atkinson College at York University.

SEMESTER 1	16 WEEKS
ACC100	Introduction to Accounting I
IS115	Introduction to Information Systems
MARK100	Introduction to Marketing
MATH114	Business Mathematics
PD100	Introduction to Distribution Management
COMM120	College English

SEMESTER 2	16 WEEKS
MARK101	Professional Presentatians
MARK201	Marketing Channel Organizatians and Systems
MATH125	Mathematics of Merchandising
ELECT000	Elective
LIBS132	Being Human: Self, Society and Meaning
COMM126	Business Writing and Optians

SEMESTER 3	16 WEEKS
MARK102	Advertising Management
MARK200	Product Planning and Pricing Policies
MARK202	Marketing Research and Informatian Systems
ELECT000	Elective
ELECT001	Business Mathematics
COMM131	Report Writing

SEMESTER 4	16 WEEKS
MARK205	Strategic Planning
MARK206	The Cansumer and Campetitive Environment
MARK207	Quantitative Marketing Analysis
MARK218	International Marketing
MARK110	Sales Promotion
ELECT000	Elective

For mare information, call Clive Cannan at (416) 867-2000 ext. 2140 between 8:30 a.m. and 4:30 p.m. or the Faculty of Business at (416) 867-2135.

NOT SURE YOU QUALIFY?
see page 6

BUSINESS ADMINISTRATION — MARKETING

GBC Code BU1098
St. James Campus
3 Years (6 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent or mature student status (see page 7). Grade 12 English and mathematics.

Graduates of Business — Marketing (BU1093) may be admitted directly into Semester 5 of this program if they satisfy academic requirements. Applicants having credentials from other colleges should request advanced standing.

ABOUT THE PROGRAM:
This program is for students who wish to follow a marketing path to senior management. Students develop expertise in the operational aspects of marketing during their first two years and are then exposed to the broader concerns of the organization as a whole. In addition, during the third year, students increase their marketing skills in several specialized fields.

The program makes extensive use of case studies, written reports, business projects, video-taped presentations, computerized business simulations and numerous computer applications that aid in analysis and decision making.

CAREER PROSPECTS:
Graduates find opportunities with a wide variety of manufacturers and distributors of industrial and consumer products, and service industries. Starting positions might be:

Assistant to Product Manager — The graduate assists in developing marketing objectives and strategies for a brand, and deals with issues of promotion, pricing, distribution, packaging, product modifications and customer research.

Retail Management Trainee — Graduates frequently enter training programs offered by progressive retailers and with experience become capable of operating a store or a department. Opportunities include management, merchandising, promotion, buying and location analysis.

Marketing Research or Advertising Agency Trainee — Graduates are qualified for entry-level jobs and quickly move up to operational levels where their analytical and decision-making skills are utilized.

ADVANCED STANDING:
Students who successfully complete this program may be exempted from up to seven credits in Atkinson College at York University. They may also negotiate on an individual basis for advanced standing at Ryerson Polytechnical University.

In addition, students who successfully complete this program may receive full credit for their three-year diploma at Northwood University in Midland, Michigan. Students can complete a four-year Bachelor of Business Administration degree in one academic year.

Further details can be obtained from the program co-ordinator or department chair.

SEMESTER 1	16 WEEKS
ACC100	Introduction to Accounting I
IS115	Introduction to Information Systems
MARK100	Introduction to Marketing
MATH114	Business Mathematics
PD100	Introduction to Distribution Management
COMM120	College English

SEMESTER 2	16 WEEKS
MARK101	Professional Presentations
MARK 201	Marketing Channel Organizations and Systems
LIBS132	Being Human: Self, Society and Meaning
MATH125	Mathematics of Merchandising
ELECT000	Elective
COMM126	Business Writing and Options

SEMESTER 3	16 WEEKS
MARK102	Advertising Management
MARK200	Product Planning and Pricing Policies
MARK202	Marketing Research and Information Systems
ELECT000	Elective
ELECT001	Business Mathematics
COMM131	Report Writing and Options

SEMESTER 4	16 WEEKS
MARK205	Strategic Planning
MARK206	The Consumer and Competitive Environment
MARK207	Quantitative Marketing Analysis
MARK218	International Marketing
MARK110	Sales Promotion
ELECT000	Elective

SEMESTER 5	16 WEEKS
BUS320	Organizational Behaviour Theory
BUS321	Financial Management
BUS326	Faculty Directed Research I
MARK300	Industrial Marketing Management
MARK303	Marketing Law

SEMESTER 6	16 WEEKS
BUS334	Managing Organizational Behaviour
BUS324	Canadian Business Policy and Strategy
BUS327	Faculty Directed Research II
MARK302	Marketing Management for Service Industries
MARK301	Management Information Systems

For more information, call Clive Cannan at (416) 867-2000 ext. 2140 from 8:30 a.m. to 4:30 p.m. or the Faculty of Business at (416) 867-2135.

COMPUTER PROGRAMMER

GBC Code BU2010
St. James Campus
64 Weeks (continuous)
Apply to GBC

Starting: At various times during the year
Certification: Diploma
Summer classes

NOTE:
This is a concentrated program taken over a continuous 64-week period. The content is identical to Business — Information Systems; however, students complete the program in less time. Start dates vary because the availability of this program is related to government sponsorship. Some fee-paying students are accepted as well as government-sponsored students.

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent or mature student status (see page 7). Grade 12 English and mathematics.

ABOUT THE PROGRAM:
This program enables students to develop proficiency in a variety of activities associated with the analysis, design, implementation and control of computerized information systems.

CAREER PROSPECTS:
Graduates will be able to code computer programs in a variety of languages working under supervision from written specifications. The broad range of topics in the program will prepare the graduate for future advancement to more senior positions in systems analysis or management.

ADVANCED STANDING:
Students who successfully complete this program can be exempted from up to four credits in Atkinson College at York University. They may also enter Semester 5 of the Business Administration — Information Systems (BU1092) program.

SEMESTER 1	16 WEEKS
MATH114	Business Mathematics
ACC100	Introduction to Accounting I
IS115	Introduction to Information Systems
MARK100	Introduction to Marketing
PD100	Introduction to Distribution Management
COMM120	College English

SEMESTER 2	16 WEEKS
MATH116	Mathematics for EDP
IS101	COBOL I
IS104	Management Information Systems
IS103	Programming
LIBS132	Being Human: Self, Society and Meaning
COMM126	Business Writing and Options

SEMESTER 3	16 WEEKS
MATH214	Statistics I
IS200	COBOL II
IS205	Database Concepts
IS210	Systems Analysis and Design
BUS124	Microcomputer Accounting Package Applications
COMM131	Report Writing and Options

SEMESTER 4	16 WEEKS
IS204	Advanced Programming
IS216	Operating Systems and Networks
IS208	Advanced IS Topics
MATH253	Quantitative Methods
PSY211	Human Resource Management
IS206	Programming in C

For more information, call Rod Campeanu at (416) 867-2000 ext. 2144 between 8:30 a.m. and 4:30 p.m. or call the Faculty of Business at (416) 867-2135.

N
W CAMPUS MAPS E
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see inside back cover

COURT REPORTING — MACHINE SHORTHAND

GBC Code BU1280
St. James Campus
3 Years (6 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 English. Typing speed of 40 wpm. Applicants complete an English aptitude test and a typing test. No previous knowledge of shorthand is required.

BACKGROUND:
A high degree of manual dexterity and communication skills are strongly recommended. Related business experience or successful completion of a recognized legal secretarial arts program would be beneficial.

PROGRAM DESCRIPTION:
This is an intensive program in verbatim reporting skills. Actual court transcripts are used in the program. Students in the program must be prepared to work on the machine for a few hours each day outside of classroom time. Upon successful completion of the program, graduates are eligible to write the Chartered Shorthand Reporters Association examination. The testing procedures used during the course are approved by this association.

This program is unique in Ontario.

CAREER PROSPECTS:
Graduates are prepared for careers in the courts, Official Examiners' offices and other government agencies. There are also many opportunities for those who wish to freelance. Graduates may also work with closed captioning for the hearing impaired.

Court reporting is a highly responsible and challenging position that involves verbatim recording of judicial proceedings and their accurate transcription. Standards of excellence, dedication and the ability to withstand long hours and pressure are qualities that the successful court reporter possesses. These qualities cannot be over-emphasized, as the outcome of a trial could be affected by the court reporter's transcript.

SEMESTER 1	16 WEEKS
ENG124	English for Court Reporting I
SHM102	Machine Shorthand Theory
ENG133	Vocabulary Enrichment
SOC126	Political Sociology: Continuing Sociol Issues

SEMESTER 2	16 WEEKS
BUS198	Transcribing the Record I
ENG125	English for Court Reporting II
SHM112	Shorthand Speed Development I
ELEC	Elective
WORD119	Introduction to Microcomputers/Ward Processing
BUS195	Tutoriol

SEMESTER 3	16 WEEKS
KB205	Keyboarding Skill Development III
SHM124	Shorthand Speed Development II
BUS148	Computer-Aided Transcription I
ENG216	English and the Legal World I
BUS199	Medical Terminology

SEMESTER 4	16 WEEKS
LAW218	Civil Procedure
ENG211	Latin I
BUS277	Court Procedures — District Court
SHM202	Shorthand Speed Development III
BUS271	Computer-Aided Transcription II
KB221	Keyboarding Skill Development IV
ENG217	English and the Legal World II

SEMESTER 5	16 WEEKS
ENG218	English for Court Reporting
BUS278	Computer-Aided Transcription III
SHM300	Shorthand Speed Development IV
ENG212	Latin II
KB300	Keyboarding Skill Development V

SEMESTER 6	16 WEEKS
SHM302	Shorthand Speed Development V
BUS279	Computer-Aided Transcription IV
KB302	Keyboarding Skills Development VI

For more information, call (416) 867-2000 ext. 2138 from 9 a.m. to 4 p.m. or call the Faculty of Business at (416) 867-2135.

HEALTH RECORDS ADMINISTRATION

B

BUSINESS

GBC Code BU1260
St. James Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Minimum of one Grade 11 or 12 science, one Grade 12 mathematics and one Grade 12 English.

ABOUT THE PROGRAM:
This two-year diploma program focuses on various aspects of the health record administrator's role. It is designed to train organizers and managers of health information services to work with management and medical staff in the health care delivery system.

Bio-medical sciences provide background knowledge of the information encountered professionally. Management and information sciences are included to allow the graduate to develop skills for dealing with people in an organizational setting and for interpreting data for a variety of users. Classroom instruction is augmented by clinical experience in all four semesters. Graduates write the national exam of the Canadian College of Health Records Administrators.

CAREER PROSPECTS:
A patient entering a health care delivery system has a record initiated upon admission for treatment. The record contains a multitude of data including personal, diagnostic and treatment details, as well as discharge information. Thousands upon thousands of these records are created each year. The health record administrator manages the system and the people who create, maintain, store, retrieve and interpret the data on these records for a variety of purposes. As a manager he/she must possess a variety of analytical, decision-making, interpersonal and communication skills.

SEMESTER 1	16 WEEKS
ANAT114	Anatomy and Physiology I
PATH103	Pathophysiology I (Microbiology)
MAN104	Management Theory I
BUS127	Health Information Management — Theory I
BUS141	Health Information Management — Laboratory I
ISI07	Introduction to Information Systems

SEMESTER 2	19 WEEKS
ANAT124	Anatomy and Physiology/Genetics II
PATH114	Pathophysiology II (Pharmacology)
MATH121	Statistical Methods and Research
BUS137	Health Information Management — Theory II
BUS151	Health Information Management — Laboratory II
MAN114	Management Theory II
PRAC116	Clinical Extension (3 weeks-35 hours/week)

SEMESTER 3	16 WEEKS
LAW214	Health Care Law
PSY208	Organizational Psychology I
BUS235	Health Record Administration — Theory III
BUS248	Health Record Administration — Laboratory III
MATH211	Hospitol Statistics I
EPI204	Epidemiology
BUS140	Microcomputers in Business

SEMESTER 4	19 WEEKS
BUS256	Health Systems Doto Analysis
PSY218	Organizational Psychology II
BUS245	Health Record Administration — Theory IV
BUS258	Health Record Administration — Laboratory IV
MATH221	Hospital Statistics II
MATH213	Biostatistics
MAN214	Management Theory III
PRAC216	Clinical Extension (3 weeks-35 hours/week)

For more information, call Heather Donovon ot (416) 867-2000 ext. 2134 between 9 a.m. and 3 p.m. ar the Faculty of Business at (416) 867-2135.

PART-TIME AND EVENING COURSES
Call 867-2464 or 1-800-263-8995

HEALTH RECORDS TECHNICIAN

GBC Code BU1290
St. James Campus
1 Year (2 semesters)
Apply to OCAS

Starting: September
Certification: Certificate
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Minimum of one Grade 11 or 12 science, one Grade 12 mathematics and one Grade 12 English.

ABOUT THE PROGRAM:
The one-year certificate program focuses on the various aspects of the health records technician's role in maintaining records and databases of health information systems. It is designed in accordance with the standards and guidelines of the Canadian College of Health Records Administrators (CCHRA) and the Ministry of Education and Training. Students develop the technical skills and attitudes needed to maintain and utilize health care data and assist in the management of a health information system. Graduates write the CCHRA national exam.

CAREER PROSPECTS:
A health records technician works in the medical record department of a hospital, clinic or other health care facility. Under the direction of the health care administrator, the graduate of the Health Records Technician program prepares, analyses and maintains health data and information required by the hospital health service facility, patient, health professionals, government and the public.

SEMESTER 1	16 WEEKS
ANAT114	Anatomy and Physiology I
PATH103	Pathophysiology I (Microbiology)
MAN104	Management Theory I
BUS127	Health Information Monagement — Theory I
BUS141	Health Information Management — Laboratory I
IS107	Introduction to Information Systems

SEMESTER 2	19 WEEKS
ANAT124	Anatomy and Physiology/Genetics II
PATH114	Pathophysiology II (Pharmacology)
MATH121	Statistical Methods and Research
MAN114	Management Theory II
BUS137	Health Information Management — Theory II
BUS151	Health Information Management — Laboratory II
PRAC116	Clinical Extension (3 weeks-35 hours/week)

For more information, call Heather Donovan at (416) 867-2000 ext. 2134 between 9 a.m. and 3 p.m. or the Faculty of Business at (416) 867-2135.

HUMAN RESOURCES MANAGEMENT

B

BUSINESS

GBC Code BU1440
St. James Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 English and mathematics. Interview.

ABOUT THE PROGRAM:
This program addresses the growing need for human resources professionals. By offering a solid foundation for a wide range of career opportunities in the field. The Human Resources Professional Association of Ontario (HRPAO) offers the designation HRP to holders of their Certificate in Personnel Management Human Resources Professional (CPM) who have three or more years of related experience. The CPM curriculum has been incorporated into George Brown's Human Resources Management program.

The HRPAO is represented on our advisory committee — a group of industry leaders who advise us on the design and delivery of the program.

CAREER PROSPECTS:
Graduates will be qualified for positions in: recruitment; compensation and benefits; training and development; human rights; health and safety; human resources information systems and research; and human resources general management in a wide variety of organizations. These entry-level positions in human resources can lead to management-level positions and, ultimately, senior-level positions.

SEMESTER 1	16 WEEKS
ACC100	Introduction to Accounting I
MATH139	Mathematics of Finance
EC105	Introduction to Economics
HRM104	Human Resources Administration
LIBS132	Being Human: Self, Society and Meaning
COMM120	College English

SEMESTER 2	16 WEEKS
ACC119	Accounting for Decision Making
IS107	Introduction to Information Systems
EC113	Labour Economics
LAW114	Employment and Human Rights Law
COMM126	Business Writing
HRM205	Recruitment and Selection

SEMESTER 3	16 WEEKS
ELS207	Speaking with Confidence
PSY208	Organizational Behaviour
HRM201	Compensation and Benefits (Pay Equity)
HRM203	Staff Training and Development
SOC213	Social History and Organized Labour in Canada
MATH214	Statistics I

SEMESTER 4	16 WEEKS
SAFE105	Workplace Health and Safety
HRM207	Human Resources Information Systems
HRM209	Human Resources Planning
HRM211	Managing Change: a Co-operative Task
HRM213	Collective Agreements: Negotiation and Administration
HRM215	Employment Equity

For more information, call (416) 867-2000 ext. 2131 between 9 a.m. and 4 p.m.or the Faculty of Business at (416) 867-2135.

INTERNATIONAL TRADE (POST DIPLOMA)

GBC Code BU4490
St. James Campus
1 Year (2 semesters)
Apply to OCAS

Starting: September
Certification: Certificate
No summer classes

PREREQUISITES:
University degree or college diploma in business and two years of relevant business, technical or professional experience.

ABOUT THE PROGRAM:
This program is designed to assist the graduate in becoming proficient and professional in dealing with products, services, time lines, quality and customer service in a cross-border, international or multi-national environment. **Work experience** is an integral part of this program. Students will complete 150 hours of practical work experience each semester on placements arranged either by the students or the faculty.

CAREER PROSPECTS:
Graduates may expect to find entry-level positions in international marketing and sales, international finance, international logistics, international project management, international purchasing, international traffic and transportation, customer service/relations and promotion of industrial products and consumer goods.

SEMESTER 1	15 WEEKS
IT405	Introduction to International Trade
IT410	International Banking and Finance
IT420	International Communications
IT425	International Market Cultures
IT430	Faculty Directed Research I
IT435	International Traffic and Transportation

SEMESTER 2	15 WEEKS
IT440	International Trade Law
IT445	International Negotiation, Bids and Purchases
IT455	International Business and Strategic Planning
IT460	International Customer Relations
IT465	Faculty Directed Research II
IT470	Customs Procedures

For more information, call Clive Cannan at (416) 867-2000 ext. 2140 between 8 a.m. and 4:30 p.m. or the Faculty of Business at (416) 867-2135.

YOUR PROGRAM MAY OFFER A BURSARY OR SCHOLARSHIP.
Contact your Program Coordinator or the Financial Assistance Office to find out.

INVESTMENT SALES ASSISTANT

GBC Code BU1410
St. James Campus
32 Weeks (2 semesters)
Apply to OCAS

Starting: September
Certification: Certificate
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). An English proficiency test and an interview are required.

ABOUT THE PROGRAM:
An investment sales assistant is the right hand of the broker in an investment firm, handling a wide range of tasks in a fast-paced, dynamic setting. George Brown's program is the only one of its kind in Canada and was developed in response to a need in the investment industry with high-level input from seven Toronto-based investment houses. This intensive 32-week program trains people to handle day-to-day transactions in financial markets and to work as an investment sales assistant. Although graduates will not be involved with selling investments directly, they will be responsible for supporting the millions of transactions that affect the financial future of corporations, governments and individual clients around the world. The program is monitored by an advisory committee made up of executives from investment companies. Together the members guide and advise the college to ensure that the program keeps pace with changes in the investment industry.

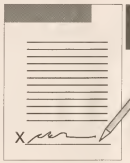
This program is unique in Canada.

CAREER PROSPECTS:
Sales assistant to financial brokers. In order to become a registered sales assistant, graduates must successfully complete the Canadian Securities course offered separately by the Canadian Securities Commission and write the examination.

SEMESTER 1	16 WEEKS
BUS152	Industry Overview
EC103	Economics I
BUS153	Financial Management and Analysis I
ELS101	Speaking with Confidence — Part I
BUS156	Faculty-Directed Canadian Securities Study I
MATH139	Mathematics of Finance

SEMESTER 2	16 WEEKS
BUS157	Financial Management and Analysis II
BUS158	Business Law
ELS102	Speaking with Confidence — Part II
BUS174	Faculty-Directed Canadian Securities Study II
EC104	Economics II
WORD119	Introduction to Microcomputers and Word Processing
BUS185	Managing Your Job and Yourself

For more information, call (416) 867-2000 ext. 2636 between 9 a.m. and 1 p.m. or the Faculty of Business at (416) 867-2135.



HOW TO APPLY
see page 8

MICROCOMPUTER OPERATOR

GBC Code BU5390
St. James Campus
28 Weeks
Apply to OCAS

Starting: Various times during the year
Certification: Certificate
Summer classes, depending on start date

PREREQUISITES:
Ontario Grade 10 in English and mathematics or demonstrated Academic Upgrading Level 3 ability on admission tests in English and mathematics. Typing speed of 25 net words per minute.

ABOUT THE PROGRAM:
This 28-week program allows students to learn microcomputer fundamentals. Included are word processing, database management, spreadsheet and general accounting applications. Students begin by learning to manually perform elementary accounting functions up to and including financial statements. Also, the proper format for business correspondence and other documents is reviewed, along with improving keyboarding skill.

CAREER PROSPECTS:
Entry-level positions in secretarial or accounting/bookkeeping areas in businesses where automated equipment is used and where people with hands-on experience with computerized equipment are required.

NOTE:
From time to time, Human Resources Development Canada purchases seats in this program, reducing the number of seats open to fee-paying students.

SEMESTER 1	14 WEEKS
KB500	Keyboarding II through IV
ENG589	Business Communications I
MATH579	Business Mathematics I
ACC512	Introduction to Accounting
BUS513	Document Preparation
BSS508	Microcomputer Fundomentals and Computer Statistics
WORD510	Word Processing

SEMESTER 2	14 WEEKS
KB501	Keyboarding II through IV
ENG590	Business Communications II
MATH580	Business Mathematics II
BUS518	Document Preparation and Machine Transcription
ACC522	Introduction to Accounting
BSS509	Database Management and Microcomputer Applications

For more information, call (416) 867-2000 ext. 2131 between 9 a.m. and 3 p.m. or the Faculty of Business at (416) 867-2135.

DENTAL OFFICE ADMINISTRATION

GBC Code BU1300
St. James Campus
1 Year (2 semesters)
Apply to OCAS

Starting: September
Certification: Certificate
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 English and Grade 11 or 12 biology and chemistry. Typing speed of approximately 25/30 wpm.

ABOUT THE PROGRAM:
This program prepares individuals with the combination of dental clinical knowledge and office administrative skills necessary for the effective management of a dental practice. This Faculty of Business program is offered in conjunction with the college's Allied Health Department and gives students the opportunity to gain practical dental office experience through visits to, and learning in, the classrooms and facilities in the college's dental programs.

This program is unique in Metro Toronto.

CAREER PROSPECTS:
Graduates of the Dental Office Administration program will be able to contribute in a meaningful way to the dental health care team. Graduates can look forward to employment in the management aspects of a dental practice.

SEMESTER 1	16 WEEKS
DENT114	Dental Office Procedures
ACC126	Introductory Accounting
ANAT117	Ora-Facial Anatomy
LIBS132	Being Human: Self, Society and Meaning
DENT136	Dimensians in Dental Management I
COMM120	College English
SOC240	Sociology

SEMESTER 2	16 WEEKS
COMM135	Advanced Grammar
EDP116	Micro and Business Applicotians
DENT133	Dental Office Procedures
DENT122	Orientation to Radiography
DENT138	Dimensions in Dental Management II
DENT134	Dental Office Admin Pre-Graduate Experience
ANAT117	Ora-Facial Anatomy

For more infarmotion, call (416) 867-2000 ext. 2636 between 9 a.m. and 1 p.m. or the Faculty of Business at (416) 867-2135.

NEED SOME CAREER ADVICE?
see page 3

OFFICE ADMINISTRATION — EXECUTIVE

GBC Code BU1061
St. James Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 English. Keyboarding is strongly recommended.

ABOUT THE PROGRAM:
This program is designed to equip students with the knowledge and skills necessary to provide adept administrative assistance in today's electronic office. Students will develop administrative skills combined with strong basic skills in typing, notetaking, accounting, word processing, oral and written communication, and office procedures. The program shares a common first semester with the Legal program.

CAREER PROSPECTS:
Graduates will be well prepared for the secretarial responsibilities in an entry-level position. This training, combined with valuable on-the-job experience, may lead to more challenging careers such as executive assistant or administrative assistant in any organization.

SEMESTER 1	16 WEEKS
MATH155	Business Mathematics I
ACC126	Introductory Accounting
LIBS132	Being Human: Self, Society and Meaning
COMM120	College English
BUS197	Document Processing

SEMESTER 2	16 WEEKS
WORD128	Word Processing
BUS140	Spreadsheet Applications
BUS143	Machine Transcription
ELECT	Elective
COMM126	Business Writing and Options
RECM209	Records Management

SEMESTER 3	16 WEEKS
WORD224	Word Processing/Machine Transcription
KB204	Keyboarding III
OP208	Office Procedures
SH208	Shorthand, Dictation and Transcription I
BUS140	Spreadsheet Applications
COMM131	Report Writing and Options

SEMESTER 4	16 WEEKS
RM209	Records Management
PSY215	Human Resource Management
WORD219	Advanced Word Processing/Machine Transcription
KB214	Keyboarding IV
COMM135	Advanced Grammar
COMM136	Job Search and Career Planning

For more information, call (416) 867-2000 ext. 2131 or the Faculty of Business at (416) 867-2135 between 8:30 a.m. and 4 p.m.

OFFICE ADMINISTRATION — LEGAL

GBC Code BU1062
St. James Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 English. Keyboarding is strongly recommended.

ABOUT THE PROGRAM:
This program is designed to equip students with the knowledge and skills necessary to provide adept administrative assistance in today's legal office. Students will develop strong basic skills in typing, notetaking, transcription, accounting, word processing, oral and written communications and office procedures. These skills are further developed and refined through the study, preparation and processing of legal correspondence and documentation.

Students are given a thorough foundation of legal terminology and office procedures in the litigation, family, corporate, commercial, real estate and estate areas of law. The traditional secretarial skills, combined with hands-on training on microcomputer equipment and relevant applications, prepare highly qualified graduates who are capable of working effectively in the legal office environment. This program shares a common first semester with the Executive program.

CAREER PROSPECTS:
Law firms and corporate legal departments are in constant need of qualified legal secretaries. Entry-level positions involve document preparation and general correspondence.

SEMESTER 1	16 WEEKS
MATH155	Business Mathematics I
ACC126	Introductory Accounting
LIBS132	Being Human: Self, Society and Meaning
COMM120	College English
BUS197	Document Processing

SEMESTER 2	16 WEEKS
WORD129	Legal Word Processing
OP206	Legal Office Procedures I
LAW107	Law I
MATH156	Business Mathematics II
ELEC	Elective
COMM126	Business Writing and Options
BUS143	Machine Transcription

SEMESTER 3	16 WEEKS
WORD220	Legal Word Processing/Machine Transcription I
OP207	Legal Office Procedures II
LAW202	Business Law I
KB204	Keyboarding III
SH208	Shorthand, Dictation and Transcription I
COMM131	Report Writing and Options

SEMESTER 4	16 WEEKS
OP217	Legal Office Procedures III
LAW203	Business Law II
KB214	Keyboarding IV
WORD221	Legal Word Processing/ Machine Transcription II
COMM135	Advanced Grammar
COMM136	Job Search and Career Planning

For more information, call (416) 867-2000 ext. 2138 or the Faculty of Business at (416) 867-2135 between 9 a.m. and 4 p.m.

PART-TIME AND EVENING COURSES
Call 867-2464 or 1-800-263-8995

OFFICE ADMINISTRATION — MEDICAL

GBC Code BU1063
St. James Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 English. Keyboarding is strongly recommended.

ABOUT THE PROGRAM:
The two-year medical program gives students the opportunity to develop the skills, abilities and knowledge needed in today's medical offices. Practical skills, including keyboarding, word processing, medical terminology, medical transcription and medical office procedures are important parts of the program. The role of modern technology in the office in terms of information processing systems is stressed.

CAREER PROSPECTS:
Employment opportunities exist in doctors' offices, clinics, pharmaceutical companies, government agencies and hospitals as medical receptionists, physicians' secretaries, hospital ward clerks, medical transcriptionists, etc. Career advancement to supervisory level is contingent on experience.

SEMESTER 1	16 WEEKS
BUS144	Medical Terminology I
MATH155	Business Mathematics I
LIBS132	Being Human: Self, Society and Meaning
COMM120	College English
BUS197	Document Processing

SEMESTER 2	16 WEEKS
ELEC	Elective
BUS139	Medical Office Procedures I
BUS143	Machine Transcription
BUS270	Medical Terminology II
MATH156	Business Mathematics II
COMM126	Business Writing and Options
WORD128	Word Processing

SEMESTER 3	16 WEEKS
BUS270	Medical Terminology II
KB204	Keyboarding III
WORD225	Medical Word Processing/ Machine Transcription I
BUS280	Medical Office Procedures II
ELEC	Elective
COMM131	Report Writing and Options

SEMESTER 4	16 WEEKS
PSY215	Human Resource Management
BUS274	Medical Terminology III
KB214	Keyboarding IV
WORD223	Medical Word Processing/ Machine Transcription II
BUS273	Medical Office Procedures III
COMM135	Advanced Grammar
COMM136	Job Search and Career Planning

For more information, call (416) 867-2000 ext. 2636 between 9 a.m. and 1 p.m. or the Faculty of Business at (416) 867-2135.

PROPERTY MANAGEMENT

GBC Code BU1140
St. James Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 English and mathematics.

ABOUT THE PROGRAM:
Every company needs good managers — people who are willing to make decisions, see that work is done on time within a budget and know how to encourage their employees to give top performance. The property management field is no exception. The curriculum of this program has been developed by leaders of the property management industry and prepares students for certification in the public and private sectors. In addition to collecting rents, the professional manager must be able to train and direct staff, set budgets, administer funds, keep tenants content, keep the property up to a standard that will increase its value and run the project as if it were his/her own investment.

Graduates of the program are employed by such firms as Royal LePage, Greenwin Property Management, Metro International and Ontario Housing Corporation.

CAREER PROSPECTS:
Graduates can expect to be employed as assistant property managers for residential properties — apartments, condominiums, town houses, public housing, co-op housing; commercial properties — office buildings, shopping centres; and industrial properties — warehouses, industrial plazas.

SEMESTER 1	16 WEEKS
HOUS111	Housekeeping — Theory
ACC100	Introduction to Accounting
SEC111	Security and Safety
LAW104	Distribution Management Law
MATH148	Mathematics
URB100	Urban Studies I
COMM120	College English

SEMESTER 2	16 WEEKS
(Second semester includes two weeks' work experience in industry.)	
REL112	Residential Management
MAIN113	Maintenance
URB110	Urban Studies — II
PROP211	Amenity and Common Area Management
PRAC111	Management Practice (Work Experience)
HOUS112	Housekeeping — Practical
ACC102	Accounting for Decision Making
COMM126	Business Writing and Options

SEMESTER 3	16 WEEKS
MARK211	Advertising and Sales Promotion
INS214	Insurance
REL212	Residential Management
PRAC213	Mortgage Administration
PROP213	Office Building Management
PRAC217	Microcomputer Use
PROJ200	Research Plan

SEMESTER 4	16 WEEKS
(Fourth semester includes two weeks' work experience in industry.)	
MARK212	Advertising and Sales Promotion
ACC213	Accounting for Property Management
PRAC211	Management Practice (Work Experience)
PROP216	Condominium Management
PROJ200	Research Project
PROP214	Shopping Centre Management
PSY215	Human Resources Development

For more information, call the co-ordinator at (416) 867-2000 ext. 2520 between 8:30 a.m. and 4:30 p.m. or call the Faculty of Business at (416) 867-2135.

SMALL BUSINESS PROGRAM

GBC Code BU1340
St. James Campus
32 Weeks (2 semesters)
Apply to OCAS

Starting: September
Certification: Certificate
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status. Grade 12 English and mathematics.

ABOUT THE PROGRAM:
The program addresses the opportunity that the growth in small business provides for graduating students suited to the needs of this vital business sector.

The program integrates the area of business principles and practice in a way that an entrepreneur can understand.

The extensive use of the case study method prepares graduates for work without a long training period.

The Small Business program will be of special interest to those people who are, or desire to be, involved in their own business. A flexible delivery format will provide students with opportunities to develop their entrepreneurial skills.

This program is unique in Metro Toronto.

CAREER PROSPECTS:
Small- and medium-size business development. Ideally suited to people managing, entering, owning, developing and operating such a business. This program will also be of interest to recent graduates who intend to operate their own business as a result of skills learned in other programs.

AREAS OF STUDY
- Entrepreneurship
- Business Basics
- Market Research
- Feasibility Assessment
- What Your Business Plan Should Contain
- Preparing Your Business Plan
- Presenting Your Business Plan
- Legal Forms of Business Ownership
- Preparing a Financial Plan
- Understanding Financial Statements
- How to Evaluate the Purchase of an Existing Business
- Assessing Franchise Opportunities
- Marketing Your Product of Service
- Site/Location Analysis
- Record Keeping
- Payroll
- Hiring and Training Employees
- Laws Pertaining to Human Resources Management
- Building Your Small Business Network
- Locating and Obtaining Government Assistance
- Legal, Regulatory and Licensing Issues
- Buying and Procurement
- Store Image, Layout and Display Techniques
- Income Taxes
- Excise Taxes
- International Marketing for Small Business
- Basic Computer Skills for Small Business

For more information, call Winstan Marcellin at (416) 867-2135.

NOT SURE YOU QUALIFY?

see page 6

SPORT AND EVENT MARKETING (POST DIPLOMA)

B

GBC Code BU4480
St. James Campus
1 Year (2 semesters)
Apply to OCAS

Starting: September
Certification: Certificate
No summer classes
(Parallel Co-op)

PREREQUISITES:
University degree or college diploma in marketing and a demonstrated interest in the sports industry and/or event management. This should include work experience in sports marketing and may include a minimum of 150 hours of any relevant work in the sports industry. Applicants must have at least one year's full-time marketing experience and a post-secondary introductory marketing credit course with a minimum grade of B to be considered for admission.

BACKGROUND:
Some computer literacy and courses in introductory accounting and finance are recommended. George Brown College offers selected evening and part-time courses in Sports Marketing (Mark 1091) and Event Marketing (Mark 9120). It is strongly recommended that one of these courses be successfully completed prior to enrolling in the program. In addition, courses in Marketing Management are also offered. Call 867-2163 for further information.

ABOUT THE PROGRAM:
People who enjoy marketing, sports, arts and cultural events can take this intensive 30-week post-diploma program. There is no other program like this in Canada or North America. Expert faculty members prepare students to work in jobs at the operational level and to move up to management positions in a sports marketing environment. Work experience (practicum internships) are an integral part of the program. The program makes extensive use of guest speakers, case studies, role playing, practical projects and simulations requiring analytical decision making. Students will be expected to find an approved co-op placement.

This program is unique in Canada.

CAREER PROSPECTS:
Graduates have the necessary skills to progress from entry-level to marketing management positions in organizations such as manufacturers and distributors of sporting goods, sport marketing agencies, sport associations, teams, government agencies, commercial sports facilities, along with organizations involved in marketing the arts and other special events.

SEMESTER 1	15 WEEKS
SPMK401	Sport and Society
SPMK402	Sport Marketing Management
SPMK405	Microcomputer Applications for Sport Marketing
SPMK404	Sport Event Planning and Management I
SPMK410	Applied Interpersonal Skills

SEMESTER 2	15 WEEKS
SPMK411	Media Applications in Sport
SPMK412	Licensing and Merchandising Sport Products
SPMK416	Financial Management for Sport Marketing
SPMK414	Sport Event Planning and Management II
SPMK400	Applications in Sport Marketing

For more information, call the Faculty of Business at (416) 867-2135 between 8:30 a.m. and 4:30 p.m. to obtain a complete information package.

FACULTY OF COMMUNITY SERVICES

Dean:
Michael Caake

Chairperson:
Georgia Quartaro

COMMUNITY SERVICES

Community service professionals work with people of all ages and backgrounds — from infants in child care centres to senior citizens. This type of work demands specialized training that is vital when working one-on-one or in a team care situation. Community Services programs foster independent thinking — so graduates can analyze a situation and take action. All programs are a careful mix of theory and field work, with students putting their new knowledge and skills to work in supervised community settings. Community Services instructors, who have had years of experience in subjects they teach, do much more than lecture. They work with students to set educational goals, resolve problems and evaluate progress. George Brown's Early Childhood Education program offers students the experience of field work in one of the college's eight nationally acclaimed, community-based child care centres.

ACTIVATION CO-ORDINATOR/GERONTOLOGY

GBC Code AP1090
St. James Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:

Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Functional-level English testing may be required. Applicants must complete a questionnaire and may be invited to attend an information session. Successful applicants must submit proof of a satisfactory medical examination. Preference is given to those applicants with a minimum of 60 hours' documented volunteer or work experience with the elderly.

Before entering Year 2 (Semester 3), students are required to produce evidence that they have completed a Standard First Aid course.

ABOUT THE PROGRAM:

George Brown has the only post-secondary college program that offers a diploma after training people to become activation co-ordinators. Activation co-ordinators are human service professionals with specific knowledge in gerontology. Their major goal is to promote and provide meaningful activity based on individual and group needs (physical, social, emotional, intellectual and spiritual).

The program develops therapeutic skills for people seeking careers in activity programming in either institutional or community settings providing services for elderly persons. The programming focus in gerontology is a specialized feature of this program.

The three-day-per-week academic component encompasses the scientific study of the process of aging. The two-day-per-week experiential component offers students the opportunity to integrate theory with practice in an institutional or community setting under the close supervision of a professional practitioner.

This program is also offered part-time.

This program is unique in Ontario.

CAREER PROSPECTS:

The increasing population of older people has created a growing demand for workers with knowledge and skills specific to the needs of later life. Graduates are employed in chronic and long-term care facilities, retirement homes, day-care centres for seniors and community-based service agencies.

ADVANCED STANDING:

Students who successfully complete this program may be considered for exemptions in other community services programs at George Brown. They may also qualify for exemptions in the Bachelor of Arts (Gerontology) program at McMaster University.

SEMESTER 1	16 WEEKS
ACT103	Ambulation and Exercise
GERI101	Biology of Aging
ACT208	Assessment Skills
ACT104	Activity Planning
ACT110	Special Needs
FLDW101	Field Work Seminar
FLDP101	Field Practice
COMM 120	College English

SEMESTER 2	16 WEEKS
ACT105	Crafts and Hobbies
PSY116	Introduction to Gerontology
ACT109	Group Process I
PSY169	Introductory Psychology
ACT226	Therapeutic Programming
ACT212	Psycho-Geriatrics
FLDW102	Field Work Seminar
FLDP102	Field Practice

SEMESTER 3	16 WEEKS
ACT210	Organizational Management Skills I
ACT106	Normalization and Remotivation
ACT214	Counselling Skills
ACT100	Human Growth and Development
ACT217	Program Development and Evaluation
ACT119	Group Process II
FLDW203	Field Work Seminar
FLDP203	Field Practice

SEMESTER 4	16 WEEKS
ACT211	Organizational Management Skills II
CS200	Volunteer Management
ACT215	Community Resources
ACT227	Values, Ethics and Professionalism
SOC172	Introductory Sociology
FLDW204	Field Work Seminar
FLDP204	Field Practice

For more information, call the Faculty of Community Services at (416) 867-2185 between 8:30 a.m. and 4 p.m.

PART-TIME AND EVENING COURSES
Call 867-2464 or 1-800-263-8995

ASSAULTED WOMEN'S AND CHILDREN'S COUNSELLOR/ADVOCATE

GBC Code AP1150
Nightingale Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:

Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Functional-level English testing may be required. Applicants must complete a questionnaire and may be invited to attend an information session. The mature student with personal, volunteer or employment experience in women's services is the preferred applicant for this program.

ABOUT THE PROGRAM:

This program provides students with a feminist analysis of the political and counselling issues related to violence against women and children. It trains students to be agents for change in their work of community education, political action and law reform. It prepares students to provide counselling and advocacy for women and children who have experienced or are experiencing violence. A major portion of the program is the field work component.

This program is unique in Canada.

CAREER PROSPECTS:

Graduates will work in a variety of settings, including transition and interval houses, rape crisis centres, women's health centres, community centres and victim/witness programs.

SEMESTER 1	16 WEEKS
AWC110	Group Process I (Support Groups)
AWC100	Women, Race and Class
AWC113	Gender Identity Development
AWC122	Introduction to Feminist Counselling
AWC106	Introduction to Feminism
AWC214	Child Witnesses to Wife Assault
AWC109	Violence Against Women Partners: Social and Political Issues
AWC108	Introduction to Violence Against Women and Children
ENG161	English
COMM120	College English

SEMESTER 2	16 WEEKS
AWC111	Group Process II (Group Dynamics)
AWC102	Psychology of Women
AWC207	Feminist Counselling: Theory and Practice
AWC118	Violence Against Women Partners: Counselling Issues
AWC115	Field Work Seminar I
AWC116	Field Placement (2 days)
AWC123	Cross Cultural Communications
ENG165	Report Writing

SEMESTER 3	16 WEEKS
AWC201	Group Process III (Group Leadership)
AWC117	Child Rape: Counselling Issues
AWC208	Reality of Rape: Social and Political Issues
AWC209	Feminist Political Action I
AWC119	Women and the Law I
AWC215	Field Work Seminar II
AWC216	Field Placement II (3 days)

SEMESTER 4	16 WEEKS
AWC211	Group Process IV (Working with Community Groups)
AWC210	Feminist Political Action II
AWC213	Reality of Rape: Counselling Issues
AWC202	Women and the Law II
AWC225	Field Work Seminar III
AWC226	Field Placement III (3 days)
AWC206	Child Rape: Social and Political Issues

For more information, call the Faculty of Community Services at (416) 867-2310 between 8:30 a.m. and 4 p.m.

CHILD AND YOUTH WORKER

GBC Code AP1110
St. James Campus
3 Years (6 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:

Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Functional-level English testing may be required. Advanced English at the senior level is strongly recommended.

All applicants must have a minimum of 60 hours of documented volunteer or work experience with older children or adolescents, which could have been gained through recreation, camp counselling, "Y" programs or volunteer community programs. This is excluding co-operative education programs taken through secondary schools.

Applicants must complete a questionnaire and may be invited to attend an information session. Successful applicants must submit proof of a satisfactory medical examination.

ABOUT THE PROGRAM:

The program develops therapeutic skills and abilities in students, enabling them to work creatively with other professionals concerned with the care and treatment of children and adolescents with problems. The academic subjects taken in the program are correlated closely with continuous supervised field experience. The development of self-awareness and emotional maturity is emphasized along with the ability to relate effectively to other people.

Field placements for this program include some of the most prestigious agencies and institutions in Canada, such as psychiatric hospitals, group homes and special education classrooms. In second and third years, students are expected to work shifts (not overnight) and may be requested to work one weekend per month.

This program is also available part-time for people who now work with troubled children or adolescents.

CAREER PROSPECTS:

Graduates find employment in treatment centres, group homes, hospitals, schools and community-based treatment programs. Employment prospects are excellent.

ADVANCED STANDING:

Graduates may qualify for exemptions in other Community Services programs at George Brown College.

SEMESTER 1	16 WEEKS
CHI109	Interviewing and Counselling I
CHI111	Introduction to Psychology
CHI112	Human Growth and Development
CHI113	Therapeutic Activities
CHI102	Integrative Seminar
CHI121	Field Practice
CHI122	Introduction to Child and Youth Care
COMM120	Language and Communication

SEMESTER 2	16 WEEKS
CHI112	Human Growth and Development
CHI113	Therapeutic Activities
CHI119	Child and Youth Work Methods I
CHI102	Integrative Seminar
CHI121	Field Practice
CHI209	Interviewing and Counselling II
CHI319	Legislation and Social Issues
COMM128	Language and Communication II

SEMESTER 3	16 WEEKS
CHI230	Programming for Adolescents
CHI200	Family Processes
CHI212	Child and Youth Care Methods II
CHI213	Integrative Seminar
CHI115	Group Dynamics
CHI214	Field Practice
CHI124	Therapeutic Foundations
COMM128	Language and Communications II

SEMESTER 4	16 WEEKS
CHI115	Group Dynamics
CHI207	Working with Families
CHI206	Human Sexuality
CHI212	Child and Youth Work Methods II
CHI213	Integrative Seminar
CHI214	Field Practice

SEMESTER 5	16 WEEKS
CHI118	Introduction to Sociology
CHI312	Exceptional Children
CHI321	Psychopathology
CHI305	Integrative Seminar
CHI306	Field Practice
CHI215	Assessments and Plans of Care

SEMESTER 6	16 WEEKS
CHI300	Values, Ethics and Professionalism
CHI321	Psychopathology
CHI308	Integrating Theory and Practice
CHI303	Supervision and Team-building
CHI305	Integrative Seminar
CHI306	Field Practice

For more information, call the Faculty of Community Services at (416) 867-2185 between 8 a.m. and 4 p.m.

COMMUNITY WORKER

GBC Code AP1070
St. James Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:

Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Functional-level English testing may be required. Background courses in sociology, social issues, political science, history and English are strongly recommended. Applicants must complete a questionnaire and may be invited to attend an information session.

BACKGROUND:

Related work experience, extensive life experience and previous community involvement are assets. Effective communication skills, a belief in the involvement of people in decision making and a commitment to human rights and social justice are essential.

ABOUT THE PROGRAM:

This is the only undergraduate program in community development in Ontario. The Community Worker program enables people with a commitment to community work to enhance and develop their knowledge and skills. Graduates of this program provide leadership to community groups who need help in identifying and taking action on community problems.

The program consists of classroom instruction and field work practice. Emphasis is placed on sharing ideas and experiences with students and faculty who represent an unusually broad variety of cultural backgrounds.

This program is unique in Ontario.

CAREER PROSPECTS:

The community worker is a generalist in community development who works primarily in a resource capacity with groups and community organizations. Graduates are employed in co-operatives, advocacy groups, community centres, health and legal clinics, immigrant and refugee services, women's organizations and in organizing new community services.

ADVANCED STANDING:

Students who successfully complete this program may qualify for exemptions in social work at Ryerson Polytechnic University, in social science/sociology programs at York University and in the Human Services Counsellor program at George Brown.

SEMESTER 1	16 WEEKS
CW122	Human Growth and Behaviour
CW132A	Sociology
CW135	Community Work Theory and Practice I
CW136	Political Science I
CW143	Human Rights
CW144	Community Work Forum
CW145	Field Work Preparation
CW146	Interpersonal Communications
ELS107	Language and Communications

SEMESTER 2	16 WEEKS
CW139	Community Work Theory and Practice II
CW140	Political Science II
CW147	Group Dynamics I
CW148A	Field Work I
CW149	Field Work Seminar I
CW150	Community Work Administration

SEMESTER 3	16 WEEKS
CW238	Counselling
CW206	Field Work II
CW225	Community Work Forum
CW236	Field Work Seminar II
CW245	Community Work Theory and Practice III
CW246	Political Science III
ELECT	Two Electives

SEMESTER 4	16 WEEKS
CW251	Group Dynamics II
CW252	Field Work III
CW253	Field Work Seminar III
CW249A	Community Work Theory and Practice IV
CW250	Political Science IV
CW254	Canadian Social Policy
ELECT	Elective

Electives differ according to student interest and community trends. Examples of electives include: Anti-Racism, Community Legal Services, Social Housing, Community Economic Development, Women's Studies, Health Advocacy, Media Literacy.

NOTE: These requirements are subject to change before Fall 1995.

For more information, call the Faculty of Community Services at (416) 867-2185 between 8:30 a.m. and 4 p.m.

SEE OUR CAREER AND WORK COUNSELLING PROGRAM
IN THE FACULTY OF ACCESS AND PREPARATORY STUDIES PAGES.

EARLY CHILDHOOD ASSISTANT
(FORMERLY DAYCARE ASSISTANT)

GBC Code AP1130
Nightingale Campus
1 Year (2 semesters)
Apply to OCAS

Starting: September
Certification: Certificate
No summer classes

PREREQUISITES:

Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Functional-level English testing may be required. Basic-level credits will be considered on an individual basis. Applicants must complete a questionnaire and may be invited to attend an information session.

Before entering Semester 2, students are required to produce evidence that they have completed a Standard First Aid course.

BACKGROUND:

Previous work/volunteer/co-op experience with young children is desirable but not essential. Courses in family studies (with a child care focus) are recommended. Successful applicants must submit proof of a satisfactory medical examination.

ABOUT THE PROGRAM:

The program trains students to work as assistants with young children age six weeks to 10 years, in child care centres, nursery schools and family home child care settings. Emphasis is placed on basic skill development. Within each semester, the weeks are divided into three days of classroom theory and two days of field experience. In addition, there is a two-week block field placement in each semester.

CAREER PROSPECTS:

Graduates find employment as assistant teachers in child care centres and nursery schools or as family home child care providers.

ADVANCED STANDING:

Graduates are eligible to apply to the second year of the college's Early Childhood Education program.

SEMESTER 1	16 WEEKS
DAY100	Infant and Child Development
DAY101	Interpersonal Communications
DAY108	Principles of Early Childhood Education I
DAY106	Preschool Skills Workshop
DAY104	Creative Activities
DAY107	Field Work Seminar
DAY105	Field Work
ELS123	Language and Communications

SEMESTER 2	16 WEEKS
DAY100	Infant and Child Development
DAY101	Interpersonal Communications
DAY108	Principles of Early Childhood Education I
DAY104	Creative Activities
DAY103	Health, Safety and Nutrition
DAY107	Field Work Seminar
DAY109	Field Work
ELS123	Language and Communications

For more information, call the Faculty of Community Services at (416) 867-2310 between 8:30 a.m. and 4 p.m.

EARLY CHILDHOOD EDUCATION

GBC Code AP1050
Nightingale Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September, February
Certification: Diploma
No summer classes

PREREQUISITES:

Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Functional-level English testing may be required. Applicants must complete a questionnaire and may be invited to attend an information session. Successful applicants must submit proof of a satisfactory medical examination. By the end of Year 2, students are required to produce evidence that they have completed a Standard First Aid course.

BACKGROUND:

Experience in working with young children is desirable.

ABOUT THE PROGRAM:

This program enables students to gain skills and knowledge through a unique system of alternate blocks of classroom theory and field practice. George Brown's program provides theoretical and practical training with infant, toddler, pre-school and school-age children. The program prepares students to work in nursery and child care settings with children aged six weeks to 10 years, including children with special needs. Emphasis is placed on integration of theory and practical skills. This unique program is divided evenly into alternating academic and field work blocks, e.g., Semester I has eight weeks of theory classes followed by seven weeks of practical experience in an approved centre.

This program is also offered part-time.

CAREER PROSPECTS:

Graduates find employment in child care centres and nursery schools. Opportunities also exist in pediatric playrooms, special education settings, parent-child resource centres, junior kindergarten and therapeutic nursery programs. Graduates are eligible to apply for advanced standing in degree programs.

YOUR PROGRAM MAY OFFER A BURSARY OR SCHOLARSHIP.

Contact your Program Coordinator or the Financial Assistance Office to find out.

SEMESTER 1	16 WEEKS
ECE100	Infant and Child Development
ECE101	Health, Safety and Nutrition
ECE103	Interpersonal Communications
ECE119	Principles of Early Childhood Education I
ECE105	Creative Expression I
PSY107	Introductory Psychology
ECE110	Field Work Seminar
ECE113	Field Practice
COM120	College English
SOC106	Intro Sociology
ELS121	English Skills I (if required)
ECE112	*Infant/Toddler Skills I OR
ECE115	Pre-School Skills II OR
ECE223	School-age Skills III

SEMESTER 2	16 WEEKS
ECE100	Infant and Child Development
ECE101	Health, Safety and Nutrition
SOC106	Introductory Sociology
ECE103	Interpersonal Communications
ECE105	Creative Expression I
ECE119	Principles of Early Childhood Education I
COM127	Field Writing
ECE111	Field Work Seminar
ECE114	Field Practice
ELS119	Language and Communications
PSY107	Intro Psychology
ECE112	Infant/Toddler Skills I OR
ECE115	Pre-School Skills II OR
ECE223	School-age Skills III

SEMESTER 3	16 WEEKS
ECE200	Human Growth and Development
ECE201	Children with Special Needs
ECE204	History and Philosophy of ECE
ECE220	Policy, Monagement and Legislation
ECE206	Family Dynamics
ECE207	Parent Involvement
ECE210	Field Work Seminar
ECE212	Field Practice
ECE217	Principles of Early Childhood Education II
ECE209	Creative Expression II
ECE112	Infant/Toddler Skills I OR
ECE115	Pre-School Skills II OR
ECE223	School-age Skills III

SEMESTER 4	16 WEEKS
ECE200	Human Growth and Development
ECE201	Children with Special Needs
ECE204	History and Philosophy of ECE
ECE220	Policy, Monagement and Legislation
ECE206	Family Dynamics
ECE207	Parent Involvement
ECE211	Field Work Seminar
ECE213	Field Practice
ECE217	Principles of Early Childhood Education II
ECE209	Creative Expression II
ECE112	Infant/Toddler Skills I OR
ECE115	Pre-School Skills II OR
ECE223	School-age Skills III

*Over the four semesters, students must complete Skills I, II and III.

For more information, call the Faculty of Community Services at (416) 867-2310 between 8:30 a.m. and 4:00 p.m.

HEALTH CARE AIDE

GBC Code AP7530
St. James Campus
16 Weeks
Apply to GBC

Starting: September, January, March/April
Certification: Certificate
Summer placement depending on start date

PREREQUISITES:
Facility in English. Attend an information session. Successful applicants must submit proof of a satisfactory medical examination.

ABOUT THE PROGRAM:
This program provides the basic training necessary for those who wish to work with clients in long-term care facilities.

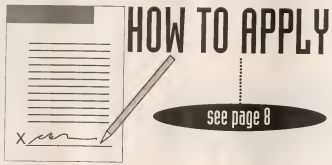
Graduates of the program work under the supervision of registered nurses or registered practical nurses. The health care aide is expected to provide personal care for the comfort and safety of residents and be involved in the process of creating a climate to promote the optimal physical, social and emotional well-being of each resident. The health care aide observes, reports and assists in maintaining records of changes in residents' conditions, and participates in providing for the total care of residents.

The Health Care Aide program was developed and is recognized by the Ministry of Health, the Ministry of Education and Training and the Ministry of Community and Social Services.

CAREER PROSPECTS:
Health care aides find employment in chronic care institutions, extended care facilities, nursing homes and homes for the aged as well as in private homes and some acute care hospitals.

COURSES	16 WEEKS
CARE900	Communications
CARE901	Biological Needs
CARE903	Social and Emotional Needs
CARE909	Activation and Ambulation
CARE908	Personal Care
CARE910	Field Practice

For more information, call the Faculty of Community Services at (416) 867-2185 between 8:30 a.m. and 4 p.m.



HUMAN SERVICES COUNSELLOR

GBC Code AP1100
St. James Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Functional-level English testing may be required. All applicants must have a minimum of 60 hours of documented, relevant volunteer or work experience in the social services. Applicants must complete a questionnaire and, based on the information given, may be invited to attend an information session. Successful applicants must submit proof of a satisfactory medical examination.

BACKGROUND:
The program is primarily aimed at mature students who are open to exploring their own values and world view, who are able to communicate well and who can show empathy. They must have the requisite volunteer social service experience and may have post-secondary education or relevant work experience. Individuals who have a history of substance abuse, psychiatric care or incarceration may be considered after two years of chemical-free and/or community-integrated lifestyle.

ABOUT THE PROGRAM:
This program offers three areas of concentration: addictions, mental health and criminal justice. Each student selects a major and minor concentration by the end of the second semester and will therefore, upon graduation, be prepared for employment as a counsellor in two of these areas.

The program combines academic and experiential classroom work with 1000 hours of supervised field work. The program is very intensive and emotionally demanding. By developing a knowledge of values, ethics and professional conduct as they relate to social policy and practice, students will explore the role of the human services counsellor as an agent of change within the social services and society. A knowledge of social inequalities as related to class, gender, race, sexual orientation, different abilities, etc., is essential for effective work in the field.

The field practicum provides at least two opportunities to practise counselling skills in a variety of settings under the supervision of professional practitioners. In Year 1, students are in the classroom three days per week and in the field two days; in Year 2 the pattern is reversed.

CAREER PROSPECTS:
Among the addictions, mental health and criminal justice settings in which graduates find employment are: addiction treatment centres, halfway houses, detox centres, community centres and group homes.

SEMESTER 1	16 WEEKS
HUS100	Field Work I
HUS101	Field Work Seminar I
HUS102	Counselling Theory and Practice I
HUS103	Group Process I
HUS104	Human Growth and Behaviour
HUS105	Sociology
HUS106	Introduction to Human Services
HUS107	Intro to Basic Research Skills
HUS110	Counselling Practice Laboratory
HUS115	Values, Ethics and Professionalism

SEMESTER 2	16 WEEKS
HUS100	Field Work I
HUS101	Field Work Seminar I
HUS102	Counselling Theory and Practice I
HUS103	Group Process I
HUS104	Human Growth and Behaviour
HUS105	Sociology
HUS109	Life Skills I
HUS110	Counselling Practice Laboratory
COMM120	College English

SEMESTER 3	16 WEEKS
HUS200	Field Work II
HUS201	Field Work Seminar II
HUS202	Counselling Theory and Practice II
HUS203	Group Process II
HUS209	Life Skills II
	Choose 2 of the following 3 electives, one as a major area of concentration and one as a minor:
HUS222	Addiction Concentration
HUS224	Mental Health Concentration
HUS226	Criminal Justice Concentration
	Choose the Special Studies course related to your major area of concentration:
HUS228	Special Studies in Addictions
HUS230	Special Studies in Mental Health
HUS232	Special Studies in Criminal Justice

SEMESTER 4	16 WEEKS
HUS200	Field Work II
HUS201	Field Work Seminar II
HUS202	Counselling Theory and Practice II
HUS203	Group Process II
HUS210	Pharmacology and Physiology
	Continue choices of major area of concentration and minor:
HUS222	Addiction Concentration
HUS224	Mental Health Concentration
HUS226	Criminal Justice Concentration
	Choose the Special Studies related to your major area of concentration:
HUS228	Special Studies in Addiction
HUS230	Special Studies in Mental Health
HUS232	Special Studies in Criminal Justice

For more information, call the Faculty of Community Services at (416) 867-2185 between 8:30 a.m. and 4 p.m.

INTERVENOR (FOR DEAF-BLIND PERSONS)

GBC Code AP1160
Nightingale Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:

Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Functional-level English testing may be required. Applicants must complete a questionnaire and may be invited to attend an information session. Successful applicants must submit proof of a satisfactory medical examination.

ABOUT THE PROGRAM:

Intervenors act as the eyes and ears for people who are both deaf and blind. Students will learn to help people with this dual disability to communicate and become more independent and, as is required in some situations, to assist them with the activities of daily living. This unique program was developed in partnership with a number of community organizations and associations such as the CNIB, Canadian Deaf-Blind and Rubella Association, Canadian National Society of the Deaf-Blind and the Deaf-Blind Association of Toronto. Through alternative communication methods, intervenors enable deaf-blind people to access information and interact with their environment. Students gain knowledge and skills to work with deaf-blind children and adults, as well as theory and practical experience in the specialized techniques of intervention.

This program is unique in Canada.

CAREER PROSPECTS:

Graduates will be qualified for a career as an intervenor with boards of education, social service agencies, deaf-blind persons, families of deaf-blind persons, community residential settings, government agencies, and specialized school programs and institutions.

SEMESTER 1	16 WEEKS
INT133	Human Growth and Development I
INT120	Interpersonal Skills
INT121	Intro. to Field and Community Resources
INT122	Deaf-Blind Communications I
INT123	Deaf-Blind Communications II
INT124	Assistive Devices Orientation and Mobility
INT125	Sociology (Relevant to Deaf-Blindness)
ENG134	English
ANAT281	Anatomy and Physiology

SEMESTER 2	16 WEEKS
INT118	Field Work Practice
INT126	Field Work Seminar
INT127	Deaf-Blind Communications I
INT128	Deaf-Blind Communications II
INT129	Human Growth and Development II
ENG153	English

SEMESTER 3	16 WEEKS
INT209	Values, Ethics and Professional Issues
INT216	Field Work Seminar
INT217	Field Work Practice
INT218	Deaf-Blind Communications I
INT219	Deaf-Blind Communications II
INT(TBA)	Deaf-Blind Communications III
INT230	Skills of Daily Living

SEMESTER 4	16 WEEKS
INT227	Research Project
INT228	Field Work Practice
INT229	Field Work Seminar
INT231	Deaf-Blind Communications I*
INT232	Deaf-Blind Communications II*
INT233	Deaf-Blind Communications III*
PSY122	Psychology

*Students will select two of the courses indicated.

For more information, call the Faculty of Community Services at (416) 867-2310 between 8:30 a.m. and 4 p.m.

NEED SOME CAREER ADVICE
see page 3

FACULTY OF CREATIVE WORK

Dean:
Luke Rombout

Chairpersons:
Peter Felder
Creative Technologies and Artisanship, Fashion Technologies and Arts

Earl Walker
Graphic Communications, Visual Arts

Leo Suakas
Graphic Communications, Printing Technologies

Heinar Pillar
Artistic Director, Performing Arts

Creative Work brings together all of George Brown's creative and artistic programs under one faculty. Our skilled and professional staff from the relevant industries enable students to further their talents so they may flourish in their chosen field. The Faculty of Creative Work offers students a wide choice of career options in Canada and gives specific focus to the following:

Creative Technologies and Artisanship

Furniture Technician Production and Design, Furniture Upholstery, and Furniture Woodworking and Finishing are taught by some of Canada's top tradespeople providing quality graduates who are in high demand.

The arts and crafts are well represented at George Brown College with Gem Setting, Gemmology, Jewellery Arts, Jewellery Repair and Ceramics providing their distinctive imprint on Canada's crafts scene.

We also offer the only Piano Technology program in Canada, where students develop the expertise needed to maintain, repair and rebuild pianos.

Fashion Technologies and Arts

Programs like Creative Fashion, Fashion Management, Apparel Pattern Drafting and Industrial Sewing Machine Technician provide students with the basic and technical skills required to enter this highly rewarding, exciting and ever-changing industry. Many of our graduates become well-respected leaders in the fashion industry. Others become entrepreneurs in developing their own particular trademark on the fashion scene. Our Advanced Apprenticeship Hairstyling program is also one of the best known in Ontario.

Graphic Communications

Our Graphic Communications Department operates on the central premise that graduates should be productive from the first day on the job. At least 70 per cent of every program in both the Printing Technologies and Visual Arts areas is devoted to project work. Students design or print the type of product they will be working on in the industry, with the same time and material constraints.

Performing Arts

The Theatre School has attracted some of the finest talent in Canada, both in terms of students and faculty. This is a rigorous program with limited enrolment to ensure personal attention is given to each student.

CERAMICS

GBC Code FT1060
Casa Loma Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Applicants are interviewed by department staff.

ABOUT THE PROGRAM:
George Brown's Ceramics program provides comprehensive training for the designer/craftsperson who chooses clay as the medium for expression. Its broad curriculum emphasizes proficiency in a wide variety of ceramic techniques. It emphasizes technical expertise in wheel throwing, hand building and casting.

Throughout the program, students are encouraged to develop their own artistic expression and style — with limited enrolment permitting individual attention by faculty.

The program allows for specialization in the third and fourth semesters by concentrating the skills development in either three or two areas chosen by the student. The option selected in semester 3 may be carried into semester 4, or a new option may be selected.

This combination of technical expertise and aesthetic development prepares students for careers in ceramics as craftspeople, designers or entrepreneurs.

CAREER PROSPECTS:
Graduates of the Ceramics program work as studio artists or take design and supervisory positions in the ceramics industry. Many enterprising graduates establish their own studios and businesses making functional and one-of-a-kind decorative objects.

ADVANCED STANDING:
Students who successfully complete this program may be eligible to enter the third year of the Bachelor of Arts program in ceramics at the Nova Scotia College of Art and Design. They may also be eligible to enter programs in third year at Sheridan College's School of Craft and Design.

Semesters 1 and 2 are camman to all students in this program. In semesters 3 and 4, students specialize by choosing ane af faur aptians.

SEMESTER 1	16 WEEKS
DES101	Design Studies
CER122	Mauldmaking and Slip Casting
CER107	Clay and Glaze Technalagy (Theary and Practice)
CER121	Wheel Thrawing
CER123	Handbuilding
COMM120	Callege English
ELECT000	General Educatian Elective

SEMESTER 2	16 WEEKS
DES150	Design Studies
CER172	Mauldmaking and Slip Casting
CER157	Clay and Glaze Technalagy
CER171	Wheel Thrawing
CER173	Handbuilding
COMM141	Cammunicatians for Ceramics Students
ELECT000	General Educatian Elective

Option 1 — Throwing, Mouldmaking, Handbuilding
Option 2 — Throwing, Mouldmaking
Option 3 — Throwing, Handbuilding
Option 4 — Handbuilding, Mouldmaking

SEMESTER 3	16 WEEKS
CER205	Clay and Glaze Technalagy
DES201	Design
HIST202	Ceramic Art History
CER221	Wheel Thrawing (with Optians 1, 2 and 3)
CER222	Mauldmaking and Slip Casting (with Optians 1, 2 and 4)
CER223	Handbuilding (with Optians 1, 3 and 4)
GENED	Introductian ta Canadian Business
INDS202	Independent Study — Lab Praject (with Optians 2, 3 and 4)

SEMESTER 4	16 WEEKS
CER257	Ceramic Technalagy
DES251	Design
HIST252	Ceramic Art History
CER271	Wheel Thrawing (with Optians 1, 2 and 3)
CER272	Mauldmaking and Slip Casting (with Optians 1, 2 and 4)
CER273	Handbuilding (with Optians 1, 3 and 4)
GENED	Introductian ta Canadian Business
INDS272	Independent Study — Lab Praject (with Optians 2, 3 and 4)

For more information, call Gerald Jahns at (416) 867-2000 ext. 4470/4465 between 9 a.m. and 4 p.m.

FURNITURE TECHNICIAN — PRODUCTION & DESIGN

GBC Code FT1040
Casa Loma Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Qualified applicants will attend an orientation session at the college prior to acceptance into the program.

BACKGROUND:
Experience in drafting, woodworking, finishing or upholstery is an asset.

ABOUT THE PROGRAM:
This program gives students exposure to a broad scope of areas within the furniture trade, including upholstery, woodworking and finishing. One-third of the furniture and upholstery industries in Canada are located in the Metro Toronto area. The furniture industry is in constant demand of skilled men and women to fill career-oriented positions in a wide range of related areas.

The furniture industry is engaged in the production and distribution of furniture for home use, and the construction and sale of fixtures, cabinets, racks and industrial equipment for use by manufacturers, retailers, schools, hospitals and transportation groups.

In the first year, the program concentrates on the three main skills in furniture manufacturing: cabinet-making, finishing and upholstering. Subjects covered include construction, design, factory organization and costing. Students work in a variety of materials including fabrics, woods and plastics. They are encouraged to work in the industry in the summer, in preparation for specialization in upholstery or wood in second year.

This program is unique in Metro Toronto.

CAREER PROSPECTS:
There is an ever-increasing need for skilled tradespeople in all areas of furniture design and production: cabinet maker; upholsterer and re-upholsterer; estimator, production supervisor, production line employee; furniture refinisher; furniture salesperson; furniture merchandise manager; consultant; display equipment specialist; interior decorator advisor; office furniture specialist.

Types of industries: Custom shops, large furniture manufacturers, retail stores, office equipment companies, furniture restoration companies, specialty shops.

OPTIONS:
Woodworking, finishing, upholstery.

Semesters 1 and 2 are common to all students in this program. In semesters 3 and 4, students specialize by choosing one of two options:

SEMESTER 1	16 WEEKS
FURN110	Cabinet Making and Wood Machining I (Class A)
FURN111	Woodworking Theory and Materials I (Class A)
FURN104	Upholstery I (Class B)
FURN112	Upholstery Theory and Materials I (Class B)
FURN109	Finishing Theory and Materials I
FURN117	Finishing I
FURN106	Technical Drawing I
SBM135	Math/Small Business Management
ELEC000	General Education

SEMESTER 2	16 WEEKS
FURN104	Upholstery I (Class A)
FURN112	Upholstery Theory and Materials I (Class A)
FURN110	Cabinet Making and Wood Machining I (Class B)
FURN111	Woodworking Theory and Materials I (Class B)
FURN159	Finishing Theory and Materials II
FURN153	Finishing II
FURN156	Technical Drawing II
FURN129	Design Foundations
FURN128	Small Business Management
ELEC000	General Education

Option 1 — Woodworking
Option 2 — Upholstery

SEMESTER 3	16 WEEKS
FURN229	Furniture Design
FURN105	Introduction to Canadian Business
SBM232	Math/Small Business Management
FURN206	Technical Drawing III (Computer Assisted)
FURN221	Wood Finishing and Restoration
FURN234	Woodworking Theory and Materials II (with Option 1)
FURN236	Cabinet Making and Wood Machining II (with Option 1)
FURN216	Industrial Sewing Machine Maintenance I (with Option 2)
FURN204	Upholstery II (with Option 2)
FURN227	Upholstery Theory and Materials II (with Option 2)

SEMESTER 4	16 WEEKS
FURN232	Furniture Design
FURN222	Introduction to Canadian Business
ENG203	Technical Communications
FURN228	Upholstery Theory and Materials III (with Option 2)
FURN240	Upholstery III (with Option 2)
FURN266	Industrial Sewing Machine Maintenance II (with Option 2)
FURN223A	Cabinet Making and Wood Machining III (with Option 1)
FURN256	Technical Drawing IV (with Option 1)
FURN261	Woodfinishing and Restoration II

Note: This program is under review and courses are subject to change.

For more information, call the Creative Technologies receptionist at (416) 867-2000 ext. 4840 between 8 a.m. and 4 p.m.

FURNITURE UPHOLSTERY (REPAIR)

GBC Code FT5450
Casa Loma Campus
1 Year (2 semesters)
Apply to OCAS

Starting: September
Certification: Certificate
No summer classes

PREREQUISITES:

Grade 10 (with credits at or above general level) or equivalent, or mature student status (see page 7). Good English comprehension. Qualified applicants must attend an orientation session and be tested for or provide evidence of manual dexterity.

ABOUT THE PROGRAM:

This program is oriented towards smaller custom shops, where the focus is on entrepreneurship, flexibility and quality. This program prepares students to repair and recondition furniture as well as to build from scratch using a new frame (i.e., springing, webbing, padding, cutting, sewing, covering, etc.).

The goals of the program are to build confidence and professional capability within the upholstery field. This is accomplished through the practical application of basic upholstery methods and the development of individual expression and creativity.

This program is unique in Metro Toronto.

CAREER PROSPECTS:

Positions available include: production line employees such as upholsterers, cutters, sewers, springers, seat makers, arm makers, back makers, cushion fillers, estimators.

There is the opportunity to expand one's career to small businesses and individual entrepreneurship.

Custom upholsterers and sample makers are in big demand, though much experience is required for these positions.

Opportunities in related areas include: interior decorator, workroom assistant, repair employee, estimator, furniture salesperson, purchasing assistant, repair supervisor.

As the new employee gains experience, advancement to custom work and design is possible.

SEMESTER 1	16 WEEKS
FURN553	Upholstery I
MATH535	Business Mathematics
ENG552	Language and Communications I
FURN551	Upholstery Theory I
FURN552A	Wood Finishing and Repair I

SEMESTER 2	16 WEEKS
FURN563	Upholstery II
ENG562	Language and Communications II
MATH537	Mathematics
FURN561	Upholstery Theory II
FURN562A	Wood Finishing and Repair II

Note: This program is under review and courses are subject to change.

For more information, call the Creative Technologies receptionist (416) 867-2000 ext. 4840 between 8 a.m. and 4 p.m.

FURNITURE — WOODWORKING AND FINISHING

GBC Code FT5440
Casa Loma Campus
1 Year (2 semesters)
Apply to OCAS

Starting: September
Certification: Certificate
No summer classes

PREREQUISITES:

Grade 10 (with credits at or above general level) or equivalent, or mature student status (see page 7). Good English comprehension. Qualified applicants must attend an orientation session and be tested for or provide evidence of manual dexterity.

ABOUT THE PROGRAM:

This program focuses on custom cabinet making rather than on mass production work. The furniture industry is engaged in not only the production of furniture for home use, but construction of fixtures, cabinets, racks and industrial equipment for retailers, manufacturers, service agencies and others. Industry tradespeople must be familiar with cabinet making and finishing. The program focuses on these skills as well as on refinishing techniques for both new and old furniture. While manual skills are emphasized, the course content includes many aspects of production management and mathematics to enable the participant to deal successfully with a variety of employment situations. Students gain experience in a wide range of hand and power tools. The history of furniture and theory of basic furniture design are also explored.

Under the direction of experienced professionals, students are carefully equipped to work in a variety of furniture companies, from small custom shops to larger manufacturers. Successful candidates will exhibit positive attitudes and self-motivation.

This program is unique in Metro Toronto.

CAREER PROSPECTS:

Positions available to graduates include: cabinet maker, finisher and refinisher, furniture restorer / touch-up, furniture builder, specialty woodworker, exhibition display builder, warehouse furniture repairer, interior decorator assistant, parts assembler, purchasing assistant.

Types of companies: Small custom shops, large manufacturers, retail stores and individual entrepreneurs.

ADVANCED STANDING:

Students who successfully complete this program may qualify for some exemptions to the Furniture Technician Production and Design program.

SEMESTER 1	16 WEEKS
FURN552	Finishing I
WOOD552	Woodworking — Shop I
WOOD551A	Woodworking — Theory
FURN554	Finishing — Theory I
MATH534	Mathematics I
FURN555	Technical Drawing I
FURN556	Furniture Design
ENG552	Language and Communications

SEMESTER 2	16 WEEKS
WOOD562	Woodworking — Shop II
FURN562	Finishing II
WOOD563	Production Management
FURN564	Finishing — Theory II
FURN 565	Technical Drawing II
FURN566	History of Furniture
ENG562	Language and Communications
MATH554	Mathematics II

Note: This program is under review and courses are subject to change.

For more information, call the Creative Technologies receptionist at (416) 867-2000 ext. 4840 between 8 a.m. and 4 p.m.

GEM SETTING

GBC Code FT4040
Casa Loma Campus
32 Weeks (2 semesters)
Apply to OCAS

Starting: September
Certification: Certificate
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Applicants who have recommendation from the industry are accepted directly. All others must be interviewed by one of the staff of the Jewellery Arts Department.

BACKGROUND:
Good eyesight or corrected vision is essential.

ABOUT THE PROGRAM:
Gem setting is a highly technical skill requiring extensive knowledge of precious gemstones and materials, as well as techniques for applying them to various jewellery items.

Students learn how to prepare various types of settings to receive the stone, and the actual curving of the metal to secure it. In the process, they use a number of different tools such as the flex shaft, different burs, setting blocks, pliers, hammers, chasing tools, purshers, beading tools and others to create a variety of settings.

They are taught the skills of bezel setting, claw setting, bead setting, setting of jewel clusters and fancy shapes such as baquette and marquise. The work is performed on several metals and alloys of different hardnesses as well as on straight and curved surfaces. The retipping with and without stones in the setting is also practised. Students also study diamond grading and small business management.

The pleasure of working with gems is augmented by substantial material rewards for a good craftsperson in this field.

This program is unique in Metro Toronto.

CAREER PROSPECTS:
Most gem setters find employment with jewellery manufacturers, but they can also be self-employed or work for large jewellery repair establishments.

SEMESTER 1	16 WEEKS
JWL418	Gem Setting V
SBM410	Small Business Management
GEM411	Diamond Grading and Evaluation
JWL411	Theory of Specialty
GEM412	Gemmology III

SEMESTER 2	16 WEEKS
JWL428	Gem Setting VI
SBM420	Small Business Management
GEM421	Diamond Grading and Evaluation
JWL421	Theory of Specialty
GEM422	Gemmology IV

For mare information, call Christel Klocke at (416) 867-2000 ext. 4433 between 8 a.m. and 3 p.m.

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see inside back cover

GEMMOLOGY

GBC Code FT1130
Casa Loma Campus
32 Weeks (2 semesters)
Apply to OCAS

Starting: September
Certification: Certificate
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7).

ABOUT THE PROGRAM:
Excellent teaching and a solid foundation in the gemmology field have contributed to the success of students in this program. They learn to analyse and classify a large number of gem materials, both natural and artificially created. The study consists of analysing chemical and physical characteristics of gem and gem-like materials and identifying different gems. The gem materials are classified according to their desirable characteristics into categories, which eventually determine the value of the gems. To accomplish the identification and classification, students use a number of specially designed instruments, such as microscopes, spectroscopes, refractometers, polariscopes and others. People who are colour-blind will have great difficulty with this program.

This program is unique in Metro Toronto.

CAREER PROSPECTS:
Graduates from this program find employment in jewellery enterprises on wholesale and retail levels. With some additional training and experience in the jewellery industry, some become jewellery appraisers. The program combines the best features of both the British and American certification programs. Graduates may write the Canadian Gemmological Association (F.C.Gm.A.) exams and the British (F.G.A.) exams to obtain internationally recognized professional designations.

SEMESTER 1	16 WEEKS
GEM100	Gemmology I
MATH123	Mathematics
CHEM106A	Chemistry I
GEM101	Gemstone Rendering
SBM201A	Small Business Management

SEMESTER 2	16 WEEKS
GEM110	Gemmology II
GEM102	Metal Testing and Identification
PHY108A	Physics
GEM103	Diamond Grading
SBM201B	Small Business Management

For mare information, call Christel Klocke at (416) 867-2000 ext. 4433 between 8 a.m. and 3 p.m.

PART-TIME AND EVENING COURSES
Call 867-2464 or 1-800-263-8935

JEWELLERY ARTS

GBC Code FT1020
Casa Loma Campus
3 Years (6 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:

Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Applicants are selected on the basis of an art portfolio and the completion of a questionnaire.

BACKGROUND:

Good eyesight (corrected vision is accepted), a high degree of manual dexterity, mechanical inclination, patience, initiative and artistic sense are the necessary qualities for a person to succeed in this field. General high-school art courses are recommended.

ABOUT THE PROGRAM:

The focus of this program is on technical skills and practical jewellery making techniques. Students learn all the various aspects of jewellery making. The emphasis during the first two years of training is on various jewellery-making techniques in the manufacturing and custom design of jewellery items. Students design their own course projects and develop them into jewellery items by using precious metals and jewels. In the third year, students select one of the following three areas of specialization:

- Gem Setting
- Goldsmithing
- Jewellery Repair — Practical

This program is unique in Metro Toronto.

CAREER PROSPECTS:

Upon completion of the program, graduates find employment in jewellery manufacturing, custom studios or jewellery stores.

ADVANCED STANDING:

Students who successfully complete this program may be eligible for exemptions from some credits in the Bachelor of Arts program in jewellery arts at the Nova Scotia College of Art and Design.

Semester 1, 2, 3 and 4 are common to all students in this program. In semesters 5 and 6, students specialize by choosing one of three options.

SEMESTER 1	16 WEEKS
JWL160	Introduction to Jewellery
GEM167	Gemmology I
JWL166	Metal Finishing
DES169	Design I
ENA170	Enamelling I
JWL165	Theory of Specialty
ELECT000	General Education

SEMESTER 2	16 WEEKS
GEM177	Gemmology II
JWL176	Metal Finishing
DES179	Design II
JWL175	Theory of Specialty
ENA180	Enamelling II
JWL171	Goldsmithing II
ELECT000	General Education

SEMESTER 3	16 WEEKS
MET266	Metallurgy III
GEM267	Gemmology III
DES269	Design
JWL251	Jewellery Repairs
JWL261	Goldsmithing III
JWL265	Theory of Specialty
ELECT000	Elective
Choose 1 of the following 2 electives:	
JWL202	Gem Setting
JWL9150	Jewellery Model Making I

SEMESTER 4	16 WEEKS
MET276	Metallurgy IV
GEM277	Gemmology IV
DES279	Design IV
JWL252	Jewellery Repairs
JWL271	Goldsmithing IV
JWL275	Theory of Specialty
ELECT000	Elective
Choose 1 of the following 2 electives:	
JWL277	Gem Setting
JWL9200	Jewellery Model Making II

Option 1 — Gem Setting
Option 2 — Goldsmithing
Option 3 — Jewellery Repair

SEMESTER 5	16 WEEKS
GEM367	Diamond Grading and Evaluation
JWL365	Theory of Specialty
SBM132	Small Business Management (with Option 1)
JWL361	Goldsmithing (with Option 1)
JWL341	Gem Setting V (with Option 2)
SBM201A	Small Business Management (with Options 2 and 3)
JWL351	Jewellery Repair (with Option 2)
JWL306	Jewellery Repair (with Option 3)

SEMESTER 6	16 WEEKS
GEM377	Diamond Grading and Evaluation
JWL375	Theory of Specialty
SBM142	Small Business Management (with Option 1)
JWL371	Goldsmithing VI (with Option 1)
JWL372	Gem Setting VI (with Option 2)
JWL352	Jewellery Repair (with Option 2)
DES379	Jewellery Design (with Option 2)
SBM201B	Small Business Management (with Options 2 and 3)
JWL316	Jewellery Repair (with Option 3)

For more information, call (416) 867-2000 ext. 4462/4463 between 8 a.m. and 3 p.m.

JEWELLERY REPAIRS

GBC Code FT4020
Casa Loma Campus
32 Weeks (2 semesters)
Apply to OCAS

Starting: September
Certification: Certificate
No summer classes

PREREQUISITES:

Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Applicants who have recommendation from the industry are accepted directly. All others must be interviewed by one of the staff of Jewellery Arts Department.

BACKGROUND:

Good eyesight (corrected vision is acceptable) and good mechanical abilities are essential.

ABOUT THE PROGRAM:

This program emphasizes skills. The jewellery repair craftsperson must be skilled in working with precious and semi-precious metals to shape missing pieces by hand, and to solder, grind, polish and finish the surface of the ornament to the same high standards as were demanded for the original production.

The program is organized so that students progress from simple to more complex repairs as their skills improve with practice. Among the repairs performed are ring sizing, re-tipping, replacement of claws, replacement of settings, chain soldering, replacement of various fittings and findings and many other repairs that are performed daily in the industry. Students also study gemmology, small business management and jewellery design to be able to restore the missing pieces to preserve the appearance of the original design, and to avoid costly mistakes. Note: This program does not include watch repair.

This program is unique in Metro Toronto.

CAREER PROSPECTS:

Jewellery repair specialists are in demand in many retail jewellery operations, large jewellery repair departments and in some wholesale establishments. Many establish their own businesses.

SEMESTER 1	16 WEEKS
JWL466	Jewellery Repair Practical
SBM410	Small Business Management
JWL411	Theory of Specialty
DES469	Design I
GEM412	Gemmology III

SEMESTER 2	16 WEEKS
JWL476	Jewellery Repair Practical
SBM420	Small Business Management
JWL421	Theory of Specialty
DES479	Design II
GEM422	Gemmology IV

For more information, call Steve Stepanian at (416) 867-2000 ext. 4464 between 8 a.m. and 2 p.m.

PIANO TECHNOLOGY

GBC Code AR1140
Casa Loma Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September 1994 (then alternate years)
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). A basic knowledge of music theory. Candidates will be required to successfully complete hearing and manual dexterity tests.

ABOUT THE PROGRAM:
Piano technicians are skilled in the repair, rebuilding and maintenance of pianos. Most often self-employed, working in or from a small workshop, they can rebuild, repair, voice and tune pianos of any piano maker.

The program and practice of the craft is suitable for both men and women who typically start their private practice tuning pianos, advising clients on work required for the preservation and repair of their instruments, and gradually building up a full practice.

This program is unique in Canada.

CAREER PROSPECTS:
Graduates have found employment servicing instruments for performing musicians and private owners of instruments, and in such institutions as school boards, universities, schools of music and concert halls.

SEMESTER 1	16 WEEKS
PIAN100	Tuning
PIAN103	Upright Rebuilding
WOOD100	Woodworking
COMM120	College English
MATH168	Math and Applied Math for Music

SEMESTER 2	16 WEEKS
PIAN100	Tuning
PIAN103	Upright Rebuilding
WOOD100	Woodworking
PIAN104	Action Regulation
COMM125-130	Communications Choices
PHY133	Applied Mechanics and Physics of the Piano

SEMESTER 3	16 WEEKS
PIAN200A	Tuning
PIAN201	Action Regulations — Repair
SBM100	Small Business Management
PIAN209	Grand Piano Rebuilding
COMM131-140	Communications Choices

SEMESTER 4	16 WEEKS
PIAN200	Tuning
PIAN201	Action Regulations — Repair
SBM200	Small Business Management
PIAN209	Grand Piano Rebuilding
LIBS105-130	General Education Choices

For more information, call the co-ordinator at (416) 867-2000 ext. 4389 or the Creative Technologies and Artisanship Office at (416) 867-2000 ext. 4840.

APPAREL PATTERN DRAFTING

GBC Code FT5400
Casa Loma Campus
1 Year (2 semesters)
Apply to OCAS

Starting: September
Certification: Certificate
No summer classes

PREREQUISITES:
George Brown College Academic Upgrading/College Preparation program to Level 2 or equivalent; or Grade 10 with credits at or above general level, technical math, English and sewing; or mature student status (see page 7). Qualified applicants must attend an orientation session and submit acceptable examples of previous sewing experience. Background courses in illustration or related to manual dexterity are helpful.

ABOUT THE PROGRAM:
This program focuses on drafting and sewing and is unique in the college system. It emphasizes the technical aspects of garment construction: making patterns, grading (sizing) and preparing to become designers' assistants. Students learn to operate a variety of industrial sewing machines and to construct a number of garments, always striving to achieve proper fit in a variety of sizes.

The program includes an introduction to the study of body types by size and proportion, so that grading between sizes can be accomplished by the student to fit various body types and dimensions. Instruction is provided in the characteristics of fabrics and thread used in construction.

Appropriate communication instruction is provided, along with résumé preparation and fashion illustration.

Given that many companies and businesses are small in size, the new employee often gains a variety of experience through total involvement in the firm's activities. Successful candidates will exhibit positive attitudes and be self-motivated.

This program is unique in Ontario.

CAREER PROSPECTS:
The pattern drafting graduate is fully prepared to enter the field in an area that is extremely receptive to saleable ideas in styling and production.

Careers in manufacturing, wholesale, retail and small design houses include: assistant designer, pattern maker/grader, illustrator, stylist, sample maker, pattern alterationist, fitter or alterationist, custom seamstress, workroom supervisor/trainee, salesperson, quality control specialist, fashion co-ordinator, entrepreneur.

ADVANCED STANDING:
Students who successfully complete this program may be eligible for exemptions in the Creative Fashion program.

SEMESTER 1	16 WEEKS
PAT543A&B	Apparel Pattern Drafting I
PAT542A	Grading I
FASH544	Fashion Illustration I
DRES562	Elementary Dressmaking
SEW562	Sewing Machine Operation I

SEMESTER 2	16 WEEKS
PAT545	Apparel Pattern Drafting II
PAT556A	Grading I
PAT546A	Apparel Pattern Drafting III
FASH554	Fashion Illustration II
DRES571	Advanced Dressmaking
SEW563A	Sewing Machine Operation II
ENG532	Fashion Communications

For more information, call Christine Hollidoy or the Fashion and Creative Technologies receptionist at (416) 867-2000 ext. 4840 between 8 a.m. and 4 p.m.

CREATIVE FASHION

GBC Code FT1010
Casa Loma Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Pre-entrance orientation session. Applicants must submit a relevant portfolio and sewing samples.

BACKGROUND:
Credits in art, family studies, mathematics, illustration, sewing techniques and social sciences are desirable.

ABOUT THE PROGRAM:
This program provides students with a thorough foundation in the skills needed to design and produce a variety of garments. The program simulates as closely as possible the fashion industry's standards, practices and facilities. Students learn basic sewing and garment assembly skills and then progress to pattern making, pattern grading, garment construction and illustration. Elective computer courses give students the opportunity to design, make markers and draft patterns on computers using leading-edge technology. An annual fashion show highlights individual student designs and marketing ideas. Students are graded on their abilities, creativity and end results. Local and national design competitions and field trips to the industry allow students to pursue their fashion interests. Some scholarships and awards are presented each year.

CAREER PROSPECTS:
Graduates can go on to careers as pattern makers, designers and assistant designers, fashion promotion specialists, assistant buyers, stylists, merchandise assistants, salespeople or store managers. Workplaces range from small specialty shops to large design houses and retail chains, and many graduates work as entrepreneurs in their own businesses.

ADVANCED STANDING:
Students who successfully complete this program with an established grade point average of 3.5 or higher may be eligible for exemptions in fashion design at Ryerson Polytechnic University.

SEMESTER 1	16 WEEKS
SEW141	Sewing Technology
PAT141	Apparel Pattern Drafting I
PAT138	Pattern Drafting
AT141	Apparel Technology I
FAB100	Fabrics I
FASH107	Fashion Illustration and Design I
ELE000	General Education

SEMESTER 2	16 WEEKS
SEW156	Sewing Laboratory — Advanced
PAT153	Apparel Pattern Drafting II
AT153	Apparel Technology Part II
PAT145	Grading Blocks
FASH157	Fashion Illustration and Design II
ELEC100	English and Communications
ELE000	General Education

SEMESTER 3	16 WEEKS
PAT201	Apparel Pattern Drafting IIIA
AT243	Apparel Technology IIIA
PAT202	Apparel Pattern Drafting IIIB
AT244	Apparel Technology IIIC
ELEC101	English and Communications
PAT282	Pattern Grading
ELEC000	Elective

Choose 1 of the following electives:

GCD200	Creative Designer
FAB100	Fabric
ACUP200	AccuMark 300 (PDS)
ACCU300	AccuMark

SEMESTER 4	16 WEEKS
AT263	Apparel Technology IVA
AT264	Apparel Technology IVB
PAT261	Apparel Pattern Drafting IV
PAT262	Fitting Technical Correctians
SBM103	Business
ELEC000	Elective

Choose 1 of the following electives:

GCD200	Creative Designer
ACCU300	AccuMark 300
ACUP200	AccuMark 200 (PDS)
COLR101	Colour Analysis

For mare information, call Christine Halliday or the Foshian and Creative Technologies receptionist at (416) 867-2000 ext. 4840 between 8 a.m. and 4 p.m.

FASHION MANAGEMENT

GBC Code FT1030
Casa Loma Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Qualified applicants will attend an orientation session at the college prior to acceptance into the program.

BACKGROUND:
Credits in business math and English, and good communication skills are essential.

ABOUT THE PROGRAM:
The Fashion Management program provides students with many of the basic skills necessary to enter this exciting field. Many employers welcome graduates because their training is well matched with the needs of the fashion world and related industries.

Starting with a hands-on course in sewing, the curriculum includes fabric analysis and sewing machine technology to provide the student with first-hand knowledge of operations performed in an apparel manufacturing organization.

There is in-depth concentration on manufacturing/production techniques as well as marketing, merchandising and retail studies. Also, courses provide the student with the general education needed to ensure future success.

Students operate their own retail store on campus. Starting with a small fund, they make and/or buy merchandise for resale to other students. In this part of the curriculum, students are responsible for promotion, purchasing, display, sales and accounting procedures, and are graded on their effectiveness in operating profitably in a team effort.

In addition to the various courses of study, each student spends a period of time each year working in the industry gaining practical work experience. Placement may be in manufacturing, distribution, marketing, etc., providing relevant industry knowledge.

CAREER PROSPECTS:
Graduates of the Fashion Management program are prepared for many of the following positions depending upon their aptitudes, desires and abilities: product coordinator, production supervisor, production scheduler, production assistant, time study engineer, quality control manager, costing analyst, assistant merchandise manager, merchandise manager, human resources director, computer assistant, purchasing agent, warehouse manager, retail store manager, retail store buyer, merchandise clerk, marketing director, systems analyst or consultant.

ADVANCED STANDING:
Students who successfully complete this program with an established minimum grade are eligible for exemptions at many U.S. universities that offer a Bachelor's degree in fashion management.

SEMESTER 1	16 WEEKS
AT112	Fashion Merchandising I
BUS117	Business Principles
ENG105	Communications
MATH172	Mathematics (Computer Assisted)
SEW141	Sewing Laboratory
FAB100	Fabrics I
AT105	Apparel Machinery and Equipment
PAT102	Design and Cutting Room Technology

SEMESTER 2	16 WEEKS + 8 WEEK PWE
AT113	Fashion Promotion
FAB160	Fabrics Analysis and Laboratory
PROD200	Production Scheduling
PSY204	Psychology/Sociology
ACC151	Accounting — Financial Management
PRGM135A	Microcamputer Intermediate
AT122	Fashion Merchandising II
PWE163	Practical Work Experience
AT111	Garment Analysis
AT200	Quality Control
AT205	Fashion Merchandise Buying

SEMESTER 3	16 WEEKS
ACC216	Advanced Accounting
AT221	Apparel Marketing
PRGM225	Microcamputer Applications I
AT203	Garment Costing I
AT262	Production Management
AT102	Wark Measurement Technology I
ENG129	Organizational Behaviour
BUS159	Business Laboratory
MAN204	Fundamentals of Management
AT193	Foshion Retail Monagement

SEMESTER 4	16 WEEKS
AT250A	Garment Costing — Computer Oriented
ACC262	Advanced Accounting — Budgeting and Forecasting
AT261	Apparel Marketing — Advanced
FAB200	Textile and Fobric Monufocturing
EC112	Introduction to Economics
AT272	Management Strategy
MAN212	Operations Management
AT151A	Work Measurement II
BUS200	Business Laboratory II

Note: This program is under review and courses are subject to change.

For mare information, call Dave Dawson or the Foshian and Creative Technologies receptionist at (416) 867-2000 ext. 4840 between 8 a.m. and 4 p.m.

INDUSTRIAL SEWING MACHINE TECHNICIAN

GBC Code FT5470
Casa Loma Campus
1 Year (2 semesters)
Apply to OCAS

Starting: September
Certification: Certificate
No summer classes

PREREQUISITES:
Grade 10 (with credits at or above general level) or equivalent, or mature student status (see page 7) or industry experience. Applicants may be asked to take a mechanical reasoning test.

ABOUT THE PROGRAM:
Industrial sewing machines are used in the production of thousands of consumer and industrial goods and component parts. The equipment used in these industries varies from simple stitching by one individual on one part to sophisticated computer-assisted assembly techniques with multiple operations being performed with the touch of a button or switch.

This full-time program equips students with the skills necessary to repair, maintain, rebuild and service much of the equipment used in these industries. The program is both practical and theoretical. It encompasses such diverse and essential subjects as electronics, sewing threads and needle characteristics, machine speeds and performance characteristics.

When students have progressed to a specified level, they will, as part of the learning process, assist in the care and maintenance of the large variety of sewing equipment used in the Fashion and Creative Technologies programs at the college. This provides students with some insight and practical experience in the types of situations they may encounter upon graduation.

This program is unique in Canada.

CAREER PROSPECTS:
In the apparel industry — sewing machine technician, maintenance engineer, methods engineer, sales engineer, machinery consultant or equipment specialist.

In other needle trades industries and as an entrepreneur — machine technician, maintenance engineer, sewing systems analyst, independent repair specialist or a dealer in specialty equipment.

SEMESTER 1	16 WEEKS
SMM500	Sewing Fundamentals
SMM502	Drive Unit
SMM503	Basic Lockstitch I
MATH508	Mathematics
RSCH500	Research and Survey — Course Projects
MILL502	Workshop Practice
SMM509	Practical Applications

SEMESTER 2	16 WEEKS
SMM510B	Basic Lockstitch II
SMM511B	Basic Chainstitch Machines
SMM514B	Bartack Machines
RSCH510B	Research and Survey — Course Projects
ENG561	Fashion Communications II
PWE500B	Practical Work Experience
SC504	Basic Electronics
SMM516A	Preventive Machine Maintenance
SMM517A	Electronic Sewing Equipment

Note: This program is under review and courses are subject to change.

For more information, call Peter Tapping or the Fashion and Creative Technologies receptionist at (416) 867-2000 ext. 4840 between 8 a.m. and 4 p.m.

NOT SURE YOU QUALIFY?
see page 6

COMMERCIAL ART

GBC Code GA5430
St. James Campus
32 Weeks
Apply to OCAS

Starting: September
Certification: Certificate
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). All applicants must submit a portfolio of eight to ten realistic drawings and pass an art test. An appointment is mandatory. Please call (416) 867-2137 to make an appointment or for more information.

ABOUT THE PROGRAM:
The Commercial Art program introduces students to the ideas, techniques and attitudes of the graphics profession. Students learn to become more aware of communications between the artist and client, as well as all phases of the printing reproduction processes.

Complete assignments or projects will be developed from concept through discussion roughs to felt-pen presentations, with particular attention to the development and presentation of finished art for printing production. The objective is a professional-level portfolio upon graduation.

This program is unique in Metro Toronto.

CAREER PROSPECTS:
There is an excellent employment rate for graduates. They obtain positions in commercial art studios, film production houses, printing and publishing companies, and major corporations that operate in-house advertising and art departments.

ADVANCED STANDING:
Successful completion of this program qualifies students to enter the second year of George Brown's Graphic Design program.

SEMESTER 1	16 WEEKS
DRAW501	Basic Drawing
ADES503	Advertising Design I
PROM501	Promotional Design I
LETT502	Lettering and Typography
COMT526	Computer Graphics and Desktop Publishing I
RETL501	Retail Advertising I

SEMESTER 2	16 WEEKS
PACK511	Package Design
ADES511	Advertising Design II
PROM511	Promotional Design II
CORP513	Corporate Design
COMP518	Computer Graphics and Desktop Publishing II
RETL511	Retail Advertising II

For more information, call Al Chang at (416) 867-2000 ext. 2026 or the School of Graphic Communications at (416) 867-2000 ext. 2137 between 8 a.m. and 5 p.m.

GRAPHIC DESIGN

GBC Code GA1020
St. James Campus
3 Years (6 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Applicants must submit a portfolio of 10 art samples, have a background with credits in art and complete an art test. Please call (416) 867-2137 to make an appointment or if more information is needed.

ABOUT THE PROGRAM:
The Graphic Design diploma program was designed to meet the needs of Toronto and other major markets. It develops students' skills and abilities to the highest level of competence in the fields of graphic design and advertising design. It is the largest career-oriented graphic design program in Canada.

Courses are constantly reviewed to give students the advantage of being up-to-date with the fast-changing design industry. In third year, students hone their skills and learn to produce high-quality artwork. They develop a solid understanding of art studio operation and the many relationships and functions in the industry. The students get first-hand information through field trips to specific businesses and personal contact with management and working professionals. The field work program gives students greater insight into the various work environments within the industry. Emphasis is on creating a highly professional portfolio.

CAREER PROSPECTS:
Upon graduation, students are prepared to pursue careers starting as junior designers which lead to professional status in the graphic design industry. Graduates obtain positions in advertising agencies, graphic design studios, art studios, packaging companies, major retail organizations, publishing companies, film production studios, printing companies, computer graphics and desktop publishing companies, and corporations that operate in-house art and advertising departments. Metropolitan Toronto is Canada's largest centre for graphic arts and offers more opportunities in advertising design and graphic design than any other region in Canada.

SEMESTER 1	16 WEEKS
COLR102	Colour Theory I
DRAW101	Fundamentals of Drawing I
DRAW102	Drawing Research I
TYPO102	Lettering and Typography I
DES103	Design Fundamentals and Concepts I
COMM120	College English
GENED109	Entreprenurship Studies

SEMESTER 2	16 WEEKS
DES105	Design and Art History I
COLR112	Colour Theory II
DRAW111	Fundamentals of Drawing II
DRAW112	Drawing Research and Multi-Media Rendering
TYPO112	Lettering and Typography II
PROD115	Conceptual Visualization and Production I
DES124	Design Fundamentals and Concepts II

SEMESTER 3	16 WEEKS
MEDI204	Media and Techniques
DRAW203	Professional Drawing I
PRGM211A	Camputer I
PROD202	Production II
CORP201	Corporate I
ADV201	Advertising I
DES203	Design I

SEMESTER 4	16 WEEKS
PRGM305	Computer II
DRAW213	Professional Drawing II
MEDI202	Media and Techniques I
CORP211	Carporate II
ADV211	Advertising II
DES223	Design II
COMM126	Business Writing and Options
COMM136	Job Search and Career Planning

SEMESTER 5	16 WEEKS
In semesters 5 and 6 students have the option of pursuing either Graphic Design or Advertising Design.	
COPY305	Creative Copywriting II
MEDI305	Media and Techniques III
PRGM315A	Camputer III
ADVERTISING DESIGN (OPTION 1)	
ADV302	Corporate Image Advertising I
ADV305	Advertising III
ILLS320	Illustratian IV
RETL305	Retail II
GRAPHIC DESIGN (OPTION 2)	
CORP305	Carporate III
DES307	2D Design I
DES309	3D Design I
DRAW305	Professianal Drawing III

SEMESTER 6	16 WEEKS
COPY315A	Creative Copywriting III
MEDI315	Media and Techniques IV
PRGM325	Camputer IV
ADVERTISING DESIGN (OPTION 1)	
ADV312	Corporate Image Advertising II
ADV315	Advertising IV
ILLS325	Illustration V
RETL315	Retail III
GRAPHIC DESIGN (OPTION 2)	
CORP315	Carporate IV
DES317	2D Design II
DES319	3D Design II
DRAW315	Professional Drawing IV

For more information, call the School of Graphic Communications at (416) 867-2000 ext. 2137.

SIGN GRAPHICS
(FORMERLY GRAPHIC SIGN DESIGN & PRODUCTION)

GBC Code GA1040
St. James Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (at or above general level) or equivalent, or mature student status (see page 7). Applicants must attend an orientation session and will be selected on the basis of a multi-part practical test of their artistic, perceptual and reproduction abilities. Please call (416) 867-2000 ext. 2137 to make an appointment or for more information.

BACKGROUND:
Credits in art from secondary school or previous training in industry or art school are desirable.

ABOUT THE PROGRAM:
The Sign Graphics program is the only one of its kind in eastern Canada and attracts students from coast to coast. It is designed to provide students with sound training in the many aspects of the sign industry.

Throughout the program, basic skills and knowledge in lettering, design and art are emphasized along with large-scale pictorials for advertising purposes. Students learn to operate computerized sign-making equipment. There is also an emphasis on designing and producing quality work at commercially acceptable rates.

Students study small business management, marketing and sales, advertising and art to round out the training to allow them to pursue a career in a varied and exciting industry.

This program is unique in Ontario.

CAREER PROSPECTS:
Metro Toronto is the major centre for the sign industry and offers more employment opportunities in this field than anywhere else in Canada. Graduates obtain positions in major sign companies (both electrical and billboard advertising companies), traditional sign shops, advertising agencies, department store chains, and the in-house sign departments of large corporations and government divisions.

SEMESTER 1	16 WEEKS
SIGN101	Signwriting
LETT101	Lettering
SP101	Screen Printing
DES110	Design and Colour
GENED105	General Educatian Foundation

SEMESTER 2	16 WEEKS
SIGN101	Signwriting
LETT101	Lettering
SP101	Screen Printing
ART100	Foundation Art
DES110	Design and Colour
GD110	History of Graphic Communications

SEMESTER 3	16 WEEKS
SIGN201	Signwriting
SHOW201	Showcard Writing
ILLS200	Illuminated Signs
SP201	Advanced Screen Printing
ART201	Pictorial Art

SEMESTER 4	16 WEEKS
SIGN201	Signwriting
SHOW201	Showcard Writing
ART210	Presentation Art
SP201	Advanced Screen Printing
DES200	Design and Colour
ILLS200	Illuminated Signs
ART201	Pictorial Art
SBM200	Small Business Management

For more information, call Fred de Jong at (416) 867-2000 ext. 2034 or the School of Graphic Communications at (416) 867-2000 ext. 2137 between 8 a.m. and 5 p.m.

YOUR PROGRAM MAY OFFER A BURSARY OR SCHOLARSHIP.
Contact your Program Coordinator or the Financial Assistance Office to find out.

SIGNWRITING

GBC Code GA5460
St. James Campus
32 Weeks
Apply to OCAS

Starting: September
Certification: Certificate
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Applicants must attend an orientation session and will be selected on the basis of a multi-part practical test of their artistic, perceptual and reproduction abilities. Please call (416) 867-2137 to make an appointment or for more information.

ABOUT THE PROGRAM:
The program is designed to give students the basic skills and knowledge necessary to work in the sign industry. Students will study typefaces suitable for sign work. They will practise lettering for show cards, banners and permanent type signs, and learn to use computerized equipment.

Various materials, paints and tools used in the sign industry will be studied; materials will be prepared and/or reclaimed for the various projects. Students will be introduced to the theory and practice of screen printing as it relates to the sign industry.

Basic layout ideas and colour theory and practice will be studied and developed into more complicated designs suitable for signs. The emphasis throughout the program will be on producing quality work.

This program is unique in Ontario.

ADVANCED STANDING:
Students who successfully complete this program may enter into second year of the Sign Graphics program.

SEMESTER 1	16 WEEKS
SIGN549	Basic Signwriting
SIGN550	Lettering
SIGN551	Screen Process Printing/Signs and Cards
SIGN547	Design & Colour I
GENED105	General Education

SEMESTER 2	16 WEEKS
SIGN553	Signwriting
SIGN545	Lettering
SIGN555	Design & Colour
SIGN554	Screen Process Printing/Sign and Cards
SIGN546	Foundation Art

For more information, call Fred de Jong at (416) 867-2000 ext. 2034 or the School of Graphic Communications at (416) 867-2000 ext. 2137 between 8 a.m. and 5 p.m.

ELECTRONIC DESKTOP COMPOSITION
(DESKTOP PUBLISHING)

GBC Code GA5480
St. James Campus
40 Weeks
Apply to OCAS

Starting: September and other possible dates
Certification: Certificate
Summer classes, depending on start date

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Credits in Grade 12 mathematics and English.

ABOUT THE PROGRAM:
This technically based program is longer and more comprehensive than most courses offered elsewhere. Students learn on both Macintosh and IBM PC computers, and develop skills for adapting to and integrating the two systems. They learn electronic page assembly, electronic paste-up and composition, and electronic pre-press functions. The program also provides a general computer applications base, enabling students to comprehend and utilize peripheral techniques and software such as computer typesetting, computer graphics, word processing, database management and spread sheet analysis.

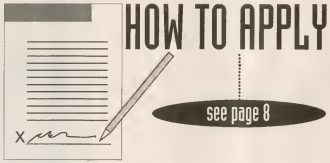
The program is unique in Ontario.

CAREER PROSPECTS:
Graduates will meet the requirements for entry-level positions in companies using desktop technology: in-plant and corporate publishing environments, traditional computer typesetting shops, instant print shops and, to some degree, graphic design studios.

NOTE:
From time to time, Human Resources Development Canada purchases seats in this program, reducing the number of seats open to fee-paying students.

COURSES	40 WEEKS
KB502	Basic Keyboarding
WORD507	Basic Word Processing
COMP529	Introduction to QuarkXPress
COMP534	Computer Literacy for Desktop Publishing
COMP512a	Typography Terms and Concepts
COMP536	Type Assembly for Desktop Publishing
COMP514c	PageMaker (IBM or Macintosh)
COMP538	PageMaker Document Production (Macintosh)
COMP540	Page Layout and Typography for Desktop Publishing (QuarkXPress)
COMP521	Ventura Publisher (IBM)
COMP525	Introduction to Printing Processes
CAM547	Photomechanical Reproduction
PSP547	Film Imposition and Offset Platemaking
COMP547	Adobe Illustrator for Graphic Production
COMP548	Adobe Photoshop for Graphic Production
COMM520	College English
SBM566	Small Business Management

For more information, call the Graphic Communications Office at (416) 867-2000 ext. 2012 or John Ward at (416) 867-2000 ext. 2021 between 8:30 a.m. and 4:30 p.m.



ELECTRONIC PREPRESS AND IMAGE ASSEMBLY

GBC Code G5510
St. James Campus
36 Weeks (2 semesters)
Apply to OCAS

Starting: September
Certification: Certificate
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma with Grade 12 mathematics and English at or above the general level, or 80 per cent in math and English on functional-level test or equivalent. Drafting techniques, mechanical aptitude and creative interests are all very useful.

ABOUT THE PROGRAM:
This technically based program is longer and more comprehensive than most courses offered elsewhere. Students learn conventional prepress and current microcomputer skills on Macintosh and PC platforms for electronic image assembly and colour page makeup.

The program is unique in Ontario.

CAREER PROSPECTS:
Graduates will meet the requirements for entry-level positions in electronic image assembly printing environments in commercial sectors, publication printing and film/colour separation studios.

SEMESTER 1	18 WEEKS
CAM101	Photomechanical Reproduction I
CAM103	Photomechanical Reproduction II
PSP105	Printing Surface Preparation I
PSP107	Printing Surface Preparation II
CAM105	Colour Separation — Scanner I
COMP109	Micracamputer Literacy
COMP107	Introduction to Printing Processes
MATH186	Technicol Mathematics

SEMESTER 2	18 WEEKS
COMP115	Introduction to Desktop Publishing (PC — PageMaker)
CAM114	Introduction to Electronic Image Assembly (MAC)
CAM116	Electronic Image Assembly — Colour
CAM112	Colour Separation — Scanner II
COMM120	College English
SC123	Integrated Science (Physics, Chemistry)

For more information, call the Graphic Communications Office at (416) 867-2000 ext. 2012 or Bill Kidd at (416) 867-2000 ext. 2017 between 8:30 a.m. and 4:30 p.m.

OFFSET PRINTING

GBC Code G5420
St. James Campus
40 Weeks
Apply to OCAS

Starting: September
Certification: Certificate
Summer classes, depending on start date

PREREQUISITES:
Grade 10, general level. All applicants must be interviewed and take tests in mechanical reasoning and colour vision. A tour of the department is strongly recommended.

ABOUT THE PROGRAM:
This short technical program is designed to train a person in the operation of various types of small offset, letterpress and narrow web label presses likely to be encountered in plants or small printing shops. Instruction is also given in pre-press operation which includes: electronic composition (Mac/PC), paste-up, basic camera (line and half tone reproduction), and printing surface preparation (stripping and platemaking). To assist students to be more beneficial to employers, some binding and finishing operations are taught. All subjects are taught on a block system. Technical time is divided — 50 per cent offset press, 25 per cent camera and stripping, and 25 per cent copy preparation, letterpress, label press and bindery.

This program is unique in Ontario.

CAREER PROSPECTS:
Graduates obtain positions in instant printing shops, in-house printing departments and small commercial printing companies.

ADVANCED STANDING:
Students who successfully complete this program may apply for exemptions to approximately 70 per cent of the course credits in the first year of the Printing Technician/Technology programs.

COURSES	40 WEEKS
COMP531	Copy Preparation (paste-up, electronic composition)
CAM534	Process Camera Operation
PSP536	Stripping and Platemaking
LTPR539	Machine Printing Letterpress/Flexo Label Press
LITH540	Machine Printing Offset
LITH510A	Machine Printing Offset (Intermediate)
BIND542	Binding and Finishing
QC501	Quality Control

For more information, call the Graphic Communications Office at (416) 867-2000 ext. 2012 or Neil Mackie at (416) 867-2000 ext. 2016 between 8:30 a.m. and 4:30 p.m.

PRINTING TECHNICIAN

GBC Code GA1000
St. James Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:

Ontario Secondary School Diploma (at or above basic level) or equivalent, or mature student status (see page 7). Grade 12 English and mathematics. Any science, physics or chemistry background is recommended. All applicants must attend an interview, a mechanical reasoning test, a colour vision test and tour of the Printing Technology Department. Students entering Semester 1 must either type 40 wpm or take a keyboarding course.

BACKGROUND:

Drafting techniques, mechanical aptitude, typing skills and creative interests are all useful in various areas of print technology.

ABOUT THE PROGRAM:

George Brown is the only post-secondary institution in Canada to offer web offset, narrow/wide web flexography and electronic pre-press. The printing industry is one of the largest employers in the greater Toronto area. More than 50 per cent of the printing in Canada is generated in southern Ontario.

The Printing Technology Department has various types of presses, desktop publishing equipment, process camera, colour scanners, stripping, platemaking and bindery equipment. Technicians in the two-year program take hands-on technical training in four major areas for each of the two years: i.e., presswork, desktop composition, camera/stripping and bindery.

This program is unique in Metro Toronto.

CAREER PROSPECTS:

Printing technicians may find employment at the introductory levels of traditional craft areas such as typographic composition (typesetting, layout, paper and film assembly), or pre-press preparatory work (camera operation, film imposition, platemaking), or press operation (in a supervised capacity tending offset or flexographic presses), or binding and finishing (operating computerized cutters, folders).

ADVANCED STANDING:

Students who successfully complete this program with a "B" average are eligible to enter the third year of the Printing Technology program.

YEAR 1	32 WEEKS
COMP104	Computer Literacy for Desktop Publishing
COMP114	Desktop Publishing
CAM100	Photomechanical Reproduction
PSP100	Film Imposition/Printing Surface Preparation
LTPR101	Machine Printing Letterpress/Flexo Label Press
LITH100	Machine Printing Offset I
LITH110	Machine Printing Offset II
BIND100	Binding and Finishing
PROD102	Introduction to Printing Plant Processes
MATH131	Mathematics (Semester 1)
COMM120	College English (Semester 1)
GENED105	General Education Foundation
AUD103	Keyboarding
MATH132	Mathematics (Semester 2)
ELECT120	Communications (Semester 2)
COMM125	Technical Writing and Options
SC120	Chemistry

YEAR 2	32 WEEKS
COMP215	Introduction to Desktop Publishing (IBM/Venturo)
CAM200	Photomechanical Reproduction
PSP200	Film Imposition/Printing Surface Preparation
FLEX200	Machine Printing Flexagraphy
ROTO200	Machine Printing Rotogravure
LITH230	Machine Printing Web Offset
LITH220	Machine Printing Offset
BIND200	Binding and Finishing
SC231	Quality Control (Semester 3)
MATH231	Mathematics (Semester 3)
SC232	Quality Control (Semester 4)
MATH232	Mathematics (Semester 4)
PHY231	Physics (Semester 3)
PHY232	Physics (Semester 4)

For more information, call the Graphic Communications Office at (416) 867-2000 ext. 2012 or Bill Kidd at (416) 867-2000 ext. 2017 between 8:30 a.m. and 4:30 p.m.

PART-TIME AND EVENING COURSES
Call 867-2464 or 1-800-263-8995

PRINTING TECHNOLOGY

GBC Code GA1010
St. James Campus
3 Years (6 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:

Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 English and mathematics. Grade 12 chemistry and Grade 11 physics are recommended. All applicants must attend an interview, a mechanical reasoning test, a colour vision test and tour of the Printing Technology Department. Students entering Semester 1 must type 40 wpm or take a keyboarding course.

BACKGROUND:

Drafting techniques, mechanical aptitude, typing skills and creative interests are all useful in various areas of printing technology.

ABOUT THE PROGRAM:

This is the only post-secondary program in Canada to offer web offset, narrow/wide web flexography and electronic prepress. The printing industry is one of the largest employers in the greater Toronto area. In fact, more than 50 per cent of the printing in Canada is generated in southern Ontario.

The Printing Technology Department has various types of presses, desktop equipment, process camera, colour scanners, stripping, platemaking and bindery equipment. Technologists in the three-year program take hands-on technical training in four major areas for each of the first two years, and then select from either preparatory or machine areas in which to specialize in the third year.

This program is unique in Canada.

CAREER PROSPECTS:

Depending on the selection of third-year technical specialization, printing technologists may find employment in the traditional craft areas of typographic composition (desktop publishing, mark-up, layout, paper and film assembly), or pre-press preparatory work (camera operation, colour separation, film imposition, platemaking), or press operation (tending various offset presses or flexographic presses), or binding and finishing (operating computerized cutters and other precision equipment for folding, stitching, assembling). In addition, there are employment opportunities in areas of quality assurance and introductory management functions (hardware applications and purchasing, technical service/repair, production control, estimating, marketing and sales).

ADVANCED STANDING:

Students who successfully complete this program may apply credits towards a four-year Bachelor of Science program at the Rochester Institute of Technology.

YEAR 1 (32 WEEKS) AND YEAR 2 (32 WEEKS)

Year 1 and Year 2 in the Printing Technology program are identical to those listed in the two-year Printing Technician program. See the previous page.

YEAR 3 — 32 WEEKS

In Year 3, students select the area in which they wish to specialize by choosing one of the two options. Students in any option will take all the courses listed in that option, plus two academic elective courses. A selection of electives from business or academic courses must be taken and the types of courses normally available are: Psychology, Statistics, Economics, Data Processing, Accounting, and Business Mathematics. Business and academic electives must total a minimum of 120 course hours for the year.

EST300	Graphic Arts Estimating (Semester 5)
TRP301	Technical Report
ELECT000	Elective
ELECT000	Elective
OPTION 1 —	**Desktop Composition and Electronic Prepress**
COMP322	PageMaker — Document Production (PC or Mac)
COMP317	Intro to QuarkXPress
COMP325	Ventura Publisher (IBM)
COMP319	Page Layout and Typography (QuarkXPress)
CAM300	Photomechanical Reproduction — Tone and Colour
CAM335	Photomechanical Reproduction — Colour Scanner and Flatbed Colour Repro
PSP300	Film Imposition/Printing Surface Prep-Colour
PSP335	Electronic Prepress and Image Assembly — Colour
OPTION 2 —	**Machine Printing and Binding/ Finishing**
LTPR300	Die Cutting and Embossing
FLEX300	Machine Printing Flexography
ROTO300	Machine Printing Rotogravure
LITH310	Machine Printing Offset
LITH320	Machine Printing Offset
LITH330	Machine Printing Web Offset
BIND304	Binding and Finishing
BIND305	Binding and Finishing

For more information, call the Graphic Communications Office at (416) 867-2000 ext. 2012 or Bill Kidd at (416) 867-2000 ext. 2017 between 8:30 a.m. and 4:30 p.m.

SCREEN PRINTING

GBC Code GA5400
St. James Campus
40 Weeks
Apply to OCAS

Starting: September
Certification: Certificate
No summer classes

PREREQUISITES:

Grade 10 (with credits at or above basic level) or equivalent, or mature student status (see page 7). All applicants must attend an orientation session, pass a mechanical reasoning test and pass a practical test of their visual perception skills and artistic ability. Please call (416) 867-2137 to make an appointment or for more information.

ABOUT THE PROGRAM:

George Brown's program puts emphasis on the technical aspects of screen printing and is the only commercial screen printing program in Canada. Screen printing is a rapidly growing segment of the specialized printing industry. Surfaces such as plastic, glass, metal, fabric, wood and paper in areas such as textiles, wallpapers, signs, advertising posters and printed circuits are all printed by this method. Students with artistic and mechanical aptitude do particularly well at this work. All subjects are taught in a modular system.

This program is unique in Canada.

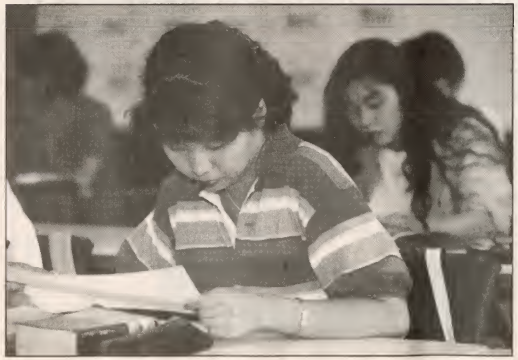
CAREER PROSPECTS:

Graduates obtain positions as camera operators, stencil cutters, layout persons, ink formulators, press operators and finishers. Some graduates have obtained positions at the management level, while others have started their own small businesses.

SEMESTER 1	20 WEEKS
SP526	Basic Mechanical Layout and Typography
SP528	Basic Stencil Film Imposition
SP529	Basic Manual and Mechanized Press Operation and Production

SEMESTER 2	20 WEEKS
SP527	Photomechanical Reproduction
SP531	Advanced Film Imposition
SP532	Intermediate Manual, Mechanized and Photo-mechanical Processing
SP530	Advanced Manual and Mechanized Press Operation and Production

For more information, call Jim Meikle at (416) 867-2000 ext. 2033 or the Graphic Communications Office at (416) 867-2000 ext. 2012 between 8:30 a.m. and 4:30 p.m.



THEATRE ARTS

GBC Code TH1050
St. James Campus
3 Years (6 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:

Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Interview and audition. Theatre arts and English courses are helpful.

ABOUT THE PROGRAM:

The George Brown Theatre School offers vigorously concentrated, career-oriented training in the fundamental skills, practicalities, traditions and professionalism needed for the performing arts. This program is well respected within the performing arts industry.

Students are taught by notable theatre artists and follow an integrated curriculum in which all subjects are directly related to the acting profession. The courses Acting I to V explore a wide range of acting styles such as classical, Elizabethan, Commedia del l'arte, Restoration, naturalism, absurdism, clowning, revue, cabaret and musical.

Enrolment is limited, ensuring personal attention to each student. Admission is competitive, based on the results of auditions and personal interviews conducted by the Artistic Director and members of the faculty.

CAREER PROSPECTS:

An ever-expanding international market creates a consistent demand for fresh faces and new talent in a range of educational, entertainment and commercial activities. Students should be aware, however, that the field is extremely competitive.

SEMESTER 1	16 WEEKS
THEA100	Acting I
THEA102	Dance I
THEA103	Movement I
THEA107	Voice I
THEA106	Vocal Music I
THEA117	Theatre History I
THEA118	Stage Combat I
THEA119	Group Improvisation
THEA112	Speech I

SEMESTER 2	16 WEEKS
THEA101	Acting II
THEA120	Workshop Performance I
THEA115	Dance II
THEA123	Movement II
THEA122	Voice II
THEA113	Vocal Music II
THEA117	Theatre History I
THEA121	Contact Improvisation
THEA124	Speech II

SEMESTER 3	16 WEEKS
THEA200	Acting III
THEA220	Children's Ploy Performance
THEA203	Dance III
THEA223	Movement III
THEA201	Voice III
THEA216	Vocal Music III
THEA217	Theatre History II
THEA218	Stage Combat II
THEA207	Business of Acting
THEA219	Make-up
THEA221	Speech III
THEA222	Monologue Study

SEMESTER 4	16 WEEKS
THEA208	Acting IV
THEA202	TV & Film Technique
THEA212	Dance IV
THEA243	Movement IV
THEA224	Voice IV
THEA226	Vocal Music IV
THEA217	Theatre History II
THEA207	Business of Acting
THEA219	Make-up
THEA227	Monologue Study
THEA228	Workshop Performance II
THEA205	Radio Technique
THEA225	Speech IV

SEMESTER 5	16 WEEKS
THEA300	Acting V
THEA301	Showcase Performance I
THEA304	Dance V
THEA303	Movement V
THEA302	Voice V
THEA306	Vocal Music V
THEA108	Costume History
THEA307	Speech V

SEMESTER 6	16 WEEKS
THEA314	Dance VI
THEA310	Showcase Performance II
THEA323	Movement VI
THEA308	Voice VI
THEA316	Vocal Music VI
THEA108	Costume History
THEA309	Speech VI

For more information, call Larry LaForet at (416) 867-2000 ext. 2167 between 8:30 a.m. and 4:00 p.m.

FACULTY OF HEALTH SCIENCES

Dean:
Lynne Mulder

Chairpersons:
Paula Price
Nursing

Mary Raspar
Nursing (Semester 1)
Nursing Assistant
Post-Diploma Nursing

Douglas Stulla
Allied Health

HEALTH SCIENCES

The Faculty of Health Sciences offers programs in the areas of nursing, orthotics and prosthetics, dental care, chiropody and fitness. All programs include intensive practical experience components that run concurrently with classroom instruction. George Brown's location in the centre of Toronto adds a valuable dimension: students in dental programs learn practical skills in a busy college-run clinic; students in orthotics-prosthetics programs work in area hospitals; chiropody students work in a clinic at Toronto Hospital; nursing students develop their skills on the units in some of the best teaching hospitals in Ontario — The Toronto Hospital, St. Joseph's Health Centre, Sunnybrook Health Science Centre, St. Michael's Hospital, The Hospital for Sick Children and Mount Sinai Hospital; and fitness students hone their skills in some of the city's top health and sports clubs. All programs emphasize self-directed learning. Students spend a significant amount of time learning at their own pace using a wide variety of teaching material including computers, videos, books and periodicals.

CHIROPODY

GBC Code DE1130
Nightingale Campus
3 Years (6 semesters)
To apply, see below

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:

This is a co-operative program with the Michener Institute and you must meet the admission requirements of the institute. For more details, please call the Registrar's Office at the Michener Institute at (416) 596-3177.

Ontario Secondary School Diploma or equivalent, with six Ontario Academic Course (OAC) credits, including one English, one chemistry and one biology, together with one physics and one mathematics at either the Grade 11 advanced level, the Grade 12 advanced level or OAC credits. Personal interview at the Michener Institute. Final admission based on academic average and interview score.

ABOUT THE PROGRAM:

Chiropody is a health care profession concerned with the care and treatment of foot disorders. Chiropodists work in clinical settings as part of a health care team and, as such, are responsible for diagnosis, treatment and management of acute and chronic foot-care problems. Our chiropody program is the only program of its type in Ontario. Jointly offered by three institutions (Toronto Hospital, Michener Institute and George Brown College), it provides students with several hundred hours of supervised clinical experience working with patients.

This program is unique in Ontario.

CAREER PROSPECTS:

To practise as a chiropodist in Ontario, graduates must successfully complete all theoretical and clinical courses and register with the Board of Regents, Chiropody. They then usually find full-time employment with hospitals or public health units.

HOW TO APPLY:

Application forms must be obtained from and submitted to the Michener Institute between November 1 and February 1 for the following September intake. Call the phone number listed at the bottom of this page.

SEMESTER 1	15 WEEKS
CLIN114	Clinical Skills
CHIR107	Chiropodial Therapeutics I
BIO122	Introductory Biology
BIO116	Anatomy and Physiology
BIO118	Micrabiology
HIST107	Histology
ENG106	Language and Communications I
ORTH114	Orthatics I

SEMESTER 2	21 WEEKS
POD127	Podalogy I
CHIR115	Chiropodial Therapeutics II
CHIR110	Emergency Care
CLIN115	Clinical Skills II
ANAT115	Anatomy and Physiology of the Lower Extremity
HUMN104	Ethics for Health Sciences
ORTH114	Orthatics I

SEMESTER 3	15 WEEKS
POD227	Podalogy II
PHAR205	Pharmacalogy
PATH208	General Pathology
BIO202	Biamechanics I
CLIN205	Clinical Skills III
PSY170	Introductory Psychalagy
ORTH215	Orthatics II
HUMN200	Chiropady in the Cammunity/Problem-Salving
BIO208	Clinical Micrabialogy

SEMESTER 4	21 WEEKS
POD237	Podalogy III
SURG202	Surgery
BIO212	Biamechanics II
PATH209	Pathalogy
CLIN215	Clinical Skills IV
ORTH215	Orthatics II
SURG203	Local Anaesthesia and Soft Tissue Surgery
CHIR215	Physical Therapy
MED219	Sports Medicine

SEMESTER 5	15 WEEKS
POD307	Podalogy IV
CLIN305	Clinical Skills V
GER200	Gerantalogy
DERM300	Dermatalogy
LAW301	Health System, Jurisprudence and Professianal Relatianships
ORTH305	Orthatics III
SURG305	Medicine and Surgery
CHIR305	Research Methods

SEMESTER 6	21 WEEKS
CLIN316	Clinical Skills VI

Note: The program is currently undergaing revisians and is subject to change.

For more information, call Pat Sennett at (416) 867-2000 ext. 3153 or Lynn Masan at (416) 867-2000 ext. 3143.

DENTAL ASSISTANT

GBC Code DE1410
Casa Loma Campus
34 Weeks (2 semesters)
Apply to OCAS

Starting: September
Certification: Certificate
No summer classes

PREREQUISITES:

Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 11 or 12 biology and chemistry. Qualified applicants will be selected on the basis of testing in English, mathematics and basic sciences. Applications must be received or postmarked no later than March 1.

ABOUT THE PROGRAM:

Students receive instruction in oro-facial anatomy, human biology, microbiology, preventive dentistry, nutrition and many other related areas to prepare for various clinical duties. A number of courses are offered through independent learning. George Brown students get work experience with University of Toronto dental students. Learning takes place alongside students in other dental programs at George Brown, including Denturism, Dental Technology, Dental Hygiene and Restorative Dental Hygiene.

The dental assistant gives chairside assistance to the operator and is qualified to take and process dental x-rays. Other duties include management of the patient and business office records, sterilization procedures and preparation of a variety of dental materials. The assistant may also become involved in oral hygiene instruction.

CAREER PROSPECTS:

Graduates may apply for certification with the Ontario Dental Nurses and Assistants Association. They find employment in private practice, public health and hospitals.

SEMESTER 1	16 WEEKS
ANAT117	Ora-Facial Anatamy
DENT106	Dental Materials I
DENT109	Pre-Clinical Dental Radiography
PCT101	Pre-Clinical Techniques (Theory)
DENT119	Dental Office Management
BIO119	Bia General Anat/Physiology I
BIO104	Micrabiology
PSY100	Social Psychology
PCT102	Pre-Clinical Techniques (Practical)
COMM149	Professianal Writing

SEMESTER 2	18 WEEKS
DENT104	Preventive Dentistry
DENT107	Dental Materials II
DENT112	Clinical Dental Radiography
NUT101	Nutritian
PCT103	Clinical Techniques (Theary)
BIO125	Bia General Anat/Physiology II
PHAR102	Pharmacalogy and Emergency Care
FLDP100	Field Practice
PCT104	Clinical Techniques (Practical)
ANAT117	Ora-Facial Anatamy
PATH112	Oral Pathalogy

For more information, call (416) 867-2000 ext. 4543 between 9 a.m. and 3 p.m.

DON'T MISS THE DENTAL OFFICE ADMINISTRATION PROGRAM IN THE BUSINESS SECTION. ..... On page 51

DENTAL HYGIENE

GBC Code DE4420
Casa Loma Campus
36 Weeks (2 semesters)
Apply to OCAS

Starting: September
Certification: Certificate
No summer classes

PREREQUISITES:
Applicants must be certified or eligible for certification as a dental assistant in Ontario and present proof of a minimum of six consecutive months of employment as a dental assistant. Candidates will be required to write all components of the Cooperative Admissions Test. In addition, candidates must be able to demonstrate competency in taking radiographs and be qualified to take radiographs as mandated by H.A.R.P. Candidates must hold a current certificate as a basic rescuer in cardiopulmonary resuscitation (CPR) issued by the Canadian Heart Foundation.

ABOUT THE PROGRAM:
The goal of the Dental Hygiene program at George Brown College is to prepare students to meet the needs of a dynamic changing profession. The program clearly articulates the new model of care — the dental hygiene process — which consists of preparation, assessment, planning, implementation and evaluation. All procedures performed for the client are based on individual needs and the client is viewed as a partner in care.

The services provided by dental hygiene students include: medical/dental history taking, intra/extraoral examination, taking and exposing radiographs and interpreting the results with a dentist, oral self-care instruction, establishing treatment goals, formulating a dental hygiene treatment plan, implementation of scaling and polishing skills for calculus and plaque debridement, amalgam polishing, nutritional counselling, application of fluoride and/or desensitizing solutions, taking impressions, application of pit and fissure sealants, removal of sutures, placement and removal of arch wires previously fitted by a dentist, and other legally prescribed orthodontic duties. Students evaluate the care provided through articulating short and long term goals and utilizing strategies for continued care.

Graduates of this program must successfully complete a certificate of registration examination established by the College of Dental Hygienists of Ontario to be eligible to practise in the province.

CAREER PROSPECTS:
Graduates may expect employment in private practice, public health, hospitals and teaching institutions.

SEMESTER 1	16 WEEKS
HIST106	General Histology for the Dental Hygienist
NUT202	Nutrition
PATH119	Pathophysiology I
PCT206	Dental Hygiene Process I
PERI100A	Periodontics I for the Dental Hygienist
ANAT206	Advanced Anatomy — Head and Neck
PSY200	Social Psychology
DENT137	Advanced Preventive Dentistry for the Dental Hygienist
BIO127	Advanced Orol Microbiology

SEMESTER 2	20 WEEKS
DENT206	Concepts in Community Health
DENT209	Advanced Radiography
HIST116A	Dental Histology and Embryology for the Dental Hygienist
NUT203A	Nutrition Counselling for the Dental Hygienist
ORTH103A	Orthodontics and Paedodontics for the Dental Hygienist
PCT207	Dental Hygiene Process II
PERI101A	Periodontics II for the Dental Hygienist
PSY200	Social Psychology
PATH112	Orol Pathology
PATH123	Pathophysiology II
DENT141	Ethics and Issues for the Dental Hygienist

For more information, call (416) 867-2000 ext. 4543.

RESTORATIVE DENTAL HYGIENE
(FORMERLY DENTAL HYGIENE — EXPANDED DUTIES)

GBC Code DE4000
Casa Loma Campus
23 Weeks
Apply to OCAS

Starting: September
Certification: Certificate
No summer classes

PREREQUISITES:
Ontario licensure as a dental hygienist with a minimum of one year of work experience.

ABOUT THE PROGRAM:
The restorative dental hygienist performs restorative procedures in addition to traditional preventive duties.

The restorative dental hygienist, in compliance with the Standards of Practice approved by the College of Dental Hygienists of Ontario, places and finishes amalgam, resin and temporary restorations and cements temporary crowns.

Students practise various procedures on a manikin, after which they spend eight weeks in a clinical setting performing restorative procedures on patients.

Graduates may write a provincial specialty examination.

This program is unique in Ontario.

CAREER PROSPECTS:
Graduates may be employed in private practice, public health and hospitals.

COURSES	23 WEEKS
DENT400	Science of Dental Materials
HIST400	Advanced Dental Histology and Embryology
PCT401	Pre-Clinical Restorative Techniques
PCT402	Clinical Techniques
DENT401	Functional Occlusion
PCT403	Clinical Techniques (Theory)

For more information, call (416) 867-2000 ext. 4543.

DENTAL TECHNOLOGY

GBC Code DE1020
Casa Loma Campus
3 Years (6 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:

Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 11 or 12 chemistry, physics and biology. Mature applicants may be required to attend a preliminary examination in science and/or English.

Qualified applicants will be selected on the basis of testing in English, mathematics and basic sciences. Qualified applicants may also be required to attend an interview and/or orientation session. Applications must be postmarked no later than March 1.

ABOUT THE PROGRAM:

Dental technologists make a major contribution to the practice of dentistry. These dental workers fabricate all the various appliances used by dentists in the treatment of patients.

Dental technologists fabricate from a dentist's prescription: orthodontic appliances, full dentures, partial dentures, crowns and bridges. The technologist may also produce specialty items such as surgical splints and sports mouthguards.

The teaching program is highly project-oriented and the student-instructor ratio allows for individual instruction throughout the program.

This program is unique in Ontario.

CAREER PROSPECTS:

Dental technicians can choose to be employed by a commercial dental laboratory, a dentist or become a sales representative with a dental supply company. Graduates will be able to write the exam after one year of experience that will qualify them as a Registered Dental Technologist in the province of Ontario.

SEMESTER 1	16 WEEKS
ANAT117	Oro-facial Anatomy
ANAT118A	Functional Anatomy I
ORTH102	Orthodontics I
LAB106	Complete Denture Construction I (Practical)
COMM120	College English

SEMESTER 2	18 WEEKS
ANAT117	Oro-facial Anatomy
ANAT119A	Functional Anatomy II
DENT125B	Crown and Bridge and Prosthodontics
DENT126	Removable Partial Denture Casting I
LIBS132	Being Human: Self, Society and Meaning

SEMESTER 3	16 WEEKS
DENT210	Complete Dentures
DENT211A	Crown and Bridge and Ceromics
DENT212	Partial Denture
ORTH206	Orthodontics
MGMT200	Intro to Microcamputers

SEMESTER 4	18 WEEKS
DENT230A	Crown and Bridge and Ceromics
DENT234A	Partial Dentures
DENT209	Orthodontics
DENT242	Complete Denture
MGMT300	Small Business Management
ELECT110	Elective — General Education

SEMESTER 5	16 WEEKS
MANG301	Business Administration
LAB305	Specialty Pre-Grad Experience I
SOC300	Sociology
LAB307	Specialty Pre-Grad Experience

SEMESTER 6	18 WEEKS
LAB307	Specialty Pre-Grad Experience II
MAN213	Dental Lab Management

For mare information, call (416) 867-2000 ext. 4543 between 9 a.m. and 3 p.m.

PART-TIME AND EVENING COURSES Call 867-2464 or 1-800-263-8995

DENTURISM
(FORMERLY DENTURE THERAPY)

GBC Code DE1070
Casa Loma Campus
3 Years (6 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:

Ontario Secondary School Diploma with credits in chemistry, physics and biology in Grade 11 and 12, at or above the general level. Mature applicants (less than Grade 12) can apply. Qualified applicants will have a written examination in English and science and may be interviewed. Candidates will be required to attend an orientation session.

ABOUT THE PROGRAM:

Students are trained in the assessment of the arches missing some or all teeth, and the design, construction and fitting of removable dentures including repair or alteration. In addition, the student will study basic science, dental science, health promotion, management and denturist practice courses. All areas of study will observe the International Baseline Competencies Profile for Denturist Education sanctioned by the Denturist Association of Canada (D.A.C.) and the International Federation of Denturists (I.F.D.).

In private practice, the denturist scope of practice is defined as the assessment of arches missing some or all teeth and the design, construction and fitting of removable dentures including repair or alteration if required.

CAREER PROSPECTS:

Denturists may choose to establish a private practice or associate with other denturists or other dental health providers.

IDEC (THE INTERNATIONAL DENTURIST EDUCATION CENTRE OF GEORGE BROWN COLLEGE), IN COOPERATION WITH THE DENTURIST PROFESSION, PROVIDES EDUCATION, TRAINING, RESEARCH AND DEVELOPMENT TO MEET THE NEEDS OF THE INTERNATIONAL DENTURIST COMMUNITY. CONTACT PROGRAM COORDINATOR MIKE VAKALIS AT (416) 867-2000 EXT. 4793 FOR MORE INFORMATION.

SEMESTER 1	16 WEEKS
ANAT117	Oro-facial Anatomy
LAB108	Denturist Practice Pre-Clinical Prosthetics (Practical)
BIO119A	Biology: General Anatomy and Physiology I
BIO104A	Microbiology and Infection Control
LAB111	Dental Materials
COMM120	College English

SEMESTER 2	18 WEEKS
HIST104A	General History/Dental Histology
ANAT205A	Oro-facial Anatomy II
DTC113	Denturist Practice/Pre-Clinical Prosthetics
BIO129A	Biology: General Anatomy Physiology II
PHAR102	Pharmacology and Emergency Care
DENT316A	Community Dentistry (Denturism)

SEMESTER 3	16 WEEKS
DTC204	Denturist Practice/Biamechenics and Prosthodontics
DTC205	Denturist Practice/Partial Dentures I
HIST109	Periodontology and Embryology
PATH119	Pathophysiology I
DENT302	Preventive Dentistry

SEMESTER 4	18 WEEKS
DTC210	Denturist Practice
DTC211	Denturist Practice/Partial Dentures II
RAD210	Radiographic Pattern Recognition
PATH123	Pathophysiology II (Medicine)
PATH112	Oral Pathology
GER203	Gerontology and the Aging Process

SEMESTER 5	16 WEEKS
DTC306	Denturist Practice
SBM100	Small Business Management
NUT101	Nutrition
DP304	Pre-Graduate Clinical

SEMESTER 6	18 WEEKS
DTC314	Denturist Practice II
DP301A	Management, Ethics and Professional Responsibilities
DTC304	Pre-Graduate Clinical
DTC316	Denturist Practice/Implant Prosthesis
HR302	Solutions and Problems in Professional Relations
ELECT110	Elective — General Education

For mare information, call (416) 867-2000 ext. 4543 between 9 a.m. and 3 p.m.

FITNESS AND LIFESTYLE MANAGEMENT

GBC Code PE1410
Casa Loma Campus
2 Years (5 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits in biology at or above general level) or equivalent, or mature student status (see page 7). Grade 11 or 12 biology. Mature student applicants will be selected on the basis of testing in English and basic sciences. Applicants must attend an orientation session offered for the program.

BACKGROUND:
Credits in chemistry and physics at the senior level are desirable. It is valuable to have experience in fitness, recreation or activity leadership as a volunteer or employee.

ABOUT THE PROGRAM:
The Fitness and Lifestyle Management program has been a leader in the provincial fitness scene for over 20 years. The program provides extensive academic and practical training within five curriculum streams: Assessment/Exercise Prescription; Leadership; Management/Program Administration; Health Promotion; and Basic and Applied Sciences.

The program prepares graduates to meet the multi-dimensional demands of a growing market in fitness and preventive health care.

Fitness professionals provide assessment, counselling, exercise prescription and leadership services that require keen motivational, technical and organizational abilities. Along with strong interpersonal and communication skills, the practical and administrative skills of fitness and lifestyle graduates are recognized by the industry and paramount in the provision and management of safe, effective fitness and health programs.

During the program's first year, students learn biology, nutrition, kinesiology and physiology with applications to exercise techniques, exercise class leadership fitness guidance and programming principles.

In the second year, students develop additional skills and knowledge in nutrition, organizational management, individual exercise design, programming and assessment for special populations. Students are also involved in operating a college fitness centre. In the final seven weeks of the program, students gain work experience in a fitness setting of their choice.

This program is unique in Metro Toronto.

CAREER PROSPECTS:
Graduates find employment in a variety of private fitness facilities, community centres, parks and recreation, employee fitness programs, hospitals and rehabilitation clinics, as well as in self-generated positions. Some specialized requests have come for ECG lab technician, exercise therapist, condominium facility manager and personal trainer.

With the focus shifting from curative to preventive health care management, career opportunities will expand in these areas and new markets will develop as more individuals adopt an active lifestyle.

ADVANCED STANDING:
Students who successfully complete this program may qualify for exemptions from credits in physical education programs in university.

SEMESTER 1	16 WEEKS
KINE100	Kinesiology I
FIT111	Introduction to Fitness Testing
FIT115	Exercise Class Leadership I
PHYS105	Muscle Physiology
BIO110	Biology
FIT107	Applied Exercise Techniques I
PROJ100	Introduction to Fitness Management
HEAL103	Introduction to Health Promotion
COMM120	College English

SEMESTER 2	18 WEEKS
KINE110	Kinesiology II
FIT113	Introduction to Fitness Testing II
FIT108	Applied Exercise Techniques II
FIT125	Exercise Class Leadership II
FIT116	Fitness Testing Clinic
NUT104	Nutrition I
PHYS108	Physiology of Exercise
LIBS132	Being Human: Self, Society and Meaning

SEMESTER 3	16 WEEKS
FIT215	Exercise Class Leadership III
ADM204	Fitness Management Projects I
FIT213	Fitness Assessment
FIT209	Guidelines to Exercise Programming
FIT207	Program Administration Clinic I
NUT206	Nutrition Guidance
HEAL213	Health Promotion
FIT205	E.C.G. Monitoring Techniques

SEMESTER 4	11 WEEKS
FIT225	Exercise Class Leadership IV
ADM214	Fitness Management Projects II
FIT223	Advanced Fitness Assessment
FIT212	Programming for Special Cases
FIT217	Program Administration Clinic II
NUT207	Nutrition Guidance (Special Cases)
PATH109	Pathology
HEAL202	Prevention and Treatment of Injuries

SEMESTER 5	7 WEEKS
PROJ205	Clinical Training in Fitness Field
FIT210	Fitness Seminars
ADM224	Fitness Management Projects III

For more information, call Beau Kent at (416) 867-2000 ext. 4562 between 9 a.m. and 5 p.m.

HEARING INSTRUMENT DISPENSER

GBC Code HD1010
Casa Loma Campus
30 Weeks (2 semesters)
Apply to OCAS

Starting: September
Certification: Certificate
No summer classes

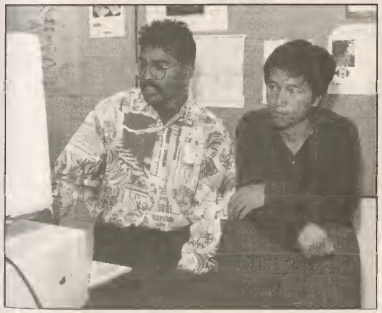
PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 11 or 12 biology. Mature students will be required to take a preliminary exam. Qualified applicants will be tested in English and basic sciences, and may be required to attend an interview.

ABOUT THE PROGRAM:
This technical program is for people who want to learn the skills necessary to be able to fit and dispense hearing instruments/aids. The teaching program includes a laboratory component as well as a pre-graduate clinical experience (offered in the second semester).

The graduate will be able to offer services that can consist of: consultation, custom fitting, taking earmold impressions, instruction in the care and use of hearing aids, adjustments, repairs, ongoing maintenance and service, and demonstrations of various other assistive listening devices. This program will appeal to people who are interested in working with people and helping clients to improve their hearing ability.

This program is unique in Ontario.

CAREER PROSPECTS:
Hearing instrument dispensers may be employed by an independent hearing dispenser centre or may wish to establish their own centre at a later date.



SEMESTER 1	15 WEEKS
ANAT127A	Functional Anatomy and Physiology
HS105A	Clinical Acoustics
PSY118	Applied Psychology
HS108	Level I Theory and Applications — Part 1
HEAL111A	Health Promotion/Life Skills Management
HS106	Audiometry & Hearing Disorders
COMM120	College English
GENED105	General Education Foundation

SEMESTER 2	15 WEEKS
GER200	Gerontology
HS111	Counselling
HS114	Level I Theory and Applications — Part 2
SBM100	Small Business Management
HS107	Ethics/Professional Management
HS119	Practicum Consolidation

For more information, call Earlene Wasik at (416) 867-2000 ext. 4543.

NURSING

GBC Code NU1030
St. James Campus
3 Years (6 semesters)
Apply to OCAS

Starting: September, January & May
Certification: Diploma

PREREQUISITES:

Ontario Secondary School Diploma (with credits at or above general level) or equivalent including Grade 12 English, mathematics and two science subjects at the Grade 11 or Grade 12 level of which biology must be one, and either chemistry or physics must be the second. An average of 60 per cent in advanced-level courses and 70 per cent in general-level courses is required for all prerequisites. Mature students (see page 7) are required to have Grade 12 academic upgrading in English, mathematics, biology and either chemistry or physics or the equivalent. All qualified applicants will be invited to write an admissions test with a fee of $25.

Students must obtain a CPR basic rescuer certificate approved by the Ontario Heart Foundation and a First Aid certificate during the first two months of Semester 1 and keep it current throughout the program. They must complete and submit the George Brown medical form during the first weeks of the program. The college recommends that students have the Hepatitis B vaccination prior to entry.

ABOUT THE PROGRAM:

This program educates individuals to become responsible and accountable practitioners of nursing in accordance with established Standards of Practice (College of Nurses of Ontario). The curriculum combines nursing, general education and clinical courses.

The central themes of the curriculum are:

- caring and helping, which are the essence of nursing
- principles of nursing practice, problem solving skills, critical thinking
- professional responsibility and accountability
- principles of adult learning

Graduates must write the Ontario Nurse Registration Exams to practise in this profession. Graduates will be eligible to file an application for assessment (in accordance with the Regulated Health Professions Act) with the College of Nurses of Ontario to be considered for registration as a nurse. For further information regarding this please contact the College of Nurses of Ontario at 928-0900.

CAREER PROSPECTS:

Graduates of the program who are successful in the Nurse Registration Examinations may be employed in acute, chronic care and convalescent hospitals, rehabilitation agencies, community nursing, retirement and nursing homes.

ADVANCED STANDING:

Students who successfully complete this program may qualify for exemptions in Bachelor of Science programs at most Ontario universities.

SEMESTER 1	18 WEEKS
NU111	Nursing Theory
NU112	Nursing Practice I
NU113	Human Relations
ANAT113	Anatomy and Physiology I
PSY115	Developmental Psychology
COMM120	College English
NU109	Transcultural Health

SEMESTER 2	18 WEEKS
NU121	Nursing Theory
NU122	Nursing Practice
PATH121	Pathology and Therapeutics I
ANAT123	Anatomy and Physiology II
PSY125	General Psychology
HUMN126	Introduction to World Religions

SEMESTER 3	18 WEEKS
NU231	Nursing Theory
NU232	Nursing Practice
PATH232	Pathology and Therapeutics II
HUMN237	Contemporary Moral Problems

SEMESTER 4	18 WEEKS
NU241	Nursing Theory
NU242	Nursing Practice
PATH243	Pathology and Therapeutics III
SOC240	Introductory Sociology

SEMESTER 5	18 WEEKS
NU351	Nursing Theory
NU352	Nursing Practice
PATH354	Pathology and Therapeutics IV
ELECT000	Elective

SEMESTER 6	18 WEEKS
NU361	Nursing Practice
NU362	Nursing Practicum VI

NOTE: Courses are subject to change.

For more information, call the Nursing Department, at (416) 867-2000 ext. 2070 between 9 a.m. and 4 p.m.

For information session dates see next page.

IF YOU DON'T QUALIFY FOR A HEALTH SCIENCES PROGRAM, SEE OUR PRE-HEALTH SCIENCE PROGRAM ON PAGE 112.

PRACTICAL NURSING
(FORMERLY NURSING ASSISTANT)

GBC Code NU1140
St. James Campus
42 Weeks
Apply to OCAS

Starting: September, January & May
Certification: Certificate

PREREQUISITES:

Ontario Secondary School Diploma (with credits at or above general level) or equivalent including Grade 12 English and mathematics and Grade 11 or 12 biology. An average of 60 per cent in advanced-level courses and 70 per cent in general-level courses is required for all prerequisites. Mature students (see page 7) are required to have a Grade 12 academic upgrading in English, mathematics and biology or the equivalent. All applicants will be required to write an admission test with a fee of $25.

Students are required to obtain a CPR basic rescuer certificate level C approved by the Ontario Heart Foundation and a First Aid certificate during the first two months of Semester 1 and to keep it current throughout the program. Applicants selected for the Practical Nursing program will be required to complete the George Brown medical form. These requirements are stipulated in the Ontario Public Hospitals' Act. The college also recommends that students have the Hepatitis B vaccination for their own safety prior to entry.

ABOUT THE PROGRAM:

Practical nurses play a vital role in the health care team in hospitals and community-based agencies. They provide basic nursing care to individuals on their own as well as with other nursing and health care team members.

Students in the program are provided with the learning opportunities to develop the competencies required to meet the Standards of Nursing Practice for Practical Nurses (College of Nurses of Ontario). Graduates of this program are eligible to apply for assessment to write the provincial registration examinations that allow them to become Registered Practical Nurses (RPN) in Ontario.

The Practical Nursing program includes a common first semester with Nursing. This provides an opportunity for students to receive full credit for Semester 1 if they choose to enter the nursing program. Semester 2 provides opportunities for the application of theory and practice in a variety of clinical settings. The succeeding six-week preceptorship experience provides students with an opportunity for more independent practice in a variety of health care settings.

CAREER PROSPECTS:

Registration of practical nurses in Ontario is obtained through successful completion of provincial registration examinations. RPNs are employed in nursing homes, retirement homes, rehabilitation agencies, acute-care hospitals and community agencies.

ADVANCED STANDING:

Students who successfully complete this program may qualify for advanced standing in George Brown's Nursing program.

SEMESTER 1	18 WEEKS
NU111	Nursing Theory I
NU112	Nursing Practicum I
NU113	Human Relations
ANAT113	Anatomy and Physiology I
PSY115	Developmental Psychology
COMM120	College English
NU109	Transcultural Health

SEMESTER 2	18 WEEKS
NU131	Nursing Theory II
NU132	Nursing Practicum II
PATH117	Pathology and Therapeutics
SOC127	Sociological Perspective

PRACTICUM	6 WEEKS
NU133	Nursing Practicum III

NOTE: Program subject to revisions in January 1995.

For more information, call (416) 867-2000 ext. 2070 between 9 a.m. and 4 p.m.

Find out more about the Nursing and Practical Nursing programs from our students and faculty at one of the following Open Houses:

Tuesday	Oct. 18, 1994	(5-7 p.m.)
Saturday	Nov. 19, 1994	(10:30 a.m.-1 p.m.)
Thursday	Dec. 8, 1994	(5-7 p.m.)
Tuesday	Feb. 14, 1995	(5-7 p.m.)
Saturday	Mar. 25, 1995	(10:30 a.m.-1 p.m.)
Tuesday	Apr. 18, 1995	(5-7 p.m.)
Thursday	May 18, 1995	(5-7 p.m.)
Tuesday	June 13, 1995	(5-7 p.m.)

Please call 867-2070 to sign up.

REFRESHER/UPGRADING NURSING PROGRAMS
(NURSING/UPGRADING FOR GRADUATE NURSES)

GBC Code NU4100
13 Weeks (plus minimum of one 7-week module)
Nightingale Campus
Apply to OCAS

Starting: September, January
Certification: Certificate

Program length varies depending on the number of modules taken. (All modules recommended.)

ABOUT THE PROGRAM:

This program is designed for registered nurses to review their skills and knowledge before returning to active practice, or for graduate nurses to upgrade before writing the certification examination required by the College of Nurses of Ontario. The 13-week core is the refresher component and is also prerequisite to the three seven-week modules: Maternal-Newborn Nursing, Pediatric Nursing and Psychiatric Nursing. Classroom theory is balanced with relevant clinical practice in downtown Toronto hospitals.

A certificate is granted upon successful completion of program requirements.

PREREQUISITES:

When applying to either program, applicants must present at time of application a current Certificate of Competence from the College of Nurses of Ontario or a letter of ruling from the College of Nurses of Ontario. In addition, an interview, a George Brown Medical Report and a current CPR basic rescuer certificate, level C (Heart and Stroke Foundation) are required. Hepatitis B vaccination is strongly recommended.

CAREER PROSPECTS:

Registered nurses who take courses of the program for refreshment purposes find employment in acute care hospitals, specialty hospitals, extended care hospitals, convalescent hospitals, rehabilitation agencies, public health agencies, retirement homes, nursing homes and community agencies. Non-registered nurses who complete courses for upgrading purposes as outlined in their letter of ruling are eligible to apply for assessment to write Provincial Registration Examinations for Nurses in Ontario.

THE CORE PROGRAM (13 WEEKS) INCLUDES:	
RBN401	Review of Basics to Nursing
MSN410	Medical-Surgical Nursing — Practical

MODULES (7 WEEKS EACH) INCLUDE:	
MATN400	Maternal-Newborn Nursing — Community Experience
MATN411	Maternal-Newborn Nursing — Practical
MATN403	Maternal-Newborn Nursing — Theory
PEDN403	Pediatric Nursing — Practical
PEDN404	Pediatric Nursing — Theory
PSYN400	Psychiatric Nursing — Community Experience
PSYN403	Psychiatric Nursing — Practical
PSYN404	Psychiatric Nursing — Theory

For more information, call Yvonne Young at (416) 867-2000 ext. 2320 between 9 a.m. and 3 p.m. or 1 (800) 265-2002.

REGISTERED NURSE — CRITICAL CARE

GBC Code NU4000
Nightingale Campus
15 Weeks (1 semester)
Apply to OCAS

Starting: September, January
Certification: Certificate
No summer classes

PREREQUISITES:

Current Certificate of Competence, College of Nurses of Ontario, or, if from out of province, eligibility for registration in Ontario; current nursing experience in an active treatment centre; B.C.L.S., level C (Heart and Stroke Foundation); an interview; and a George Brown medical report. Hepatitis B vaccination is strongly recommended.

ABOUT THE PROGRAM:

This program prepares registered nurses to give competent care to critically ill individuals and their families.

The program is divided into two phases, each consisting of a theory and a clinical component. In Phase I, the focus is on learning core concepts of critical care nursing through a study of the stable, critically ill individual. In Phase II, students build on the core concepts and focus on the unstable, critically ill individual experiencing complex, multisystem problems.

Theory includes:

- advanced anatomy and physiology of the vital systems, i.e., cardiovascular, respiratory, renal, nervous and endocrine
- pathology of selected diseases, including medical assessment and management
- nurse's role in selected assessment and supportive measures, e.g., electrocardiogram, hemodynamic monitoring, venipuncture, intracranial pressure monitoring, ventilators
- systematic nursing assessment of all body systems
- use of nursing process in the critical care setting
- relevant medical-moral issues
- legal aspects of critical care nursing
- ways to promote communication, group process, prevent stress and burn-out.

Clinical practice is arranged in one of the downtown Toronto hospitals.

COURSES	15 WEEKS
CCN400	Critical Care Nursing — Theory and Lab — General
CCN401	Critical Care — Pathotherapeutics
CCN402	Critical Care Nursing — Practicum — General
CCN403	Critical Care Nursing — Theory — Advanced
CCN404	Critical Care Nursing — Practicum — Advanced

For more information, call Nazlin Kassam at (416) 867-2000 ext. 2345 or 1 (800) 265-2002 between 9 a.m. and 3 p.m.

REGISTERED NURSE — OPERATING ROOM

GBC Code NU4010
Nightingale Campus
16 Weeks (1 semester)
Apply to OCAS

Starting: September, January
Certification: Certificate
No summer classes

PREREQUISITES:

Current Certificate of Competence, College of Nurses of Ontario, or if from out-of-province, eligibility for registration in Ontario; current nursing experience in an active treatment centre (optional); B.C.L.S., level C (Heart and Stroke Foundation); an interview, and a George Brown medical report. Hepatitis B vaccination is strongly recommended.

ABOUT THE PROGRAM:

This program prepares registered nurses to function competently as team members in an operating room. It offers unique clinical experience on a full-time basis.

The program is organized in three phases. Phase I consists of five weeks of theory, including:

- relevant anatomy and physiology
- principles of asepsis
- duties of scrub and circulating nurses
- intensive study of surgical interventions, their indication(s) and complication(s).

Phase II is a nine-week practicum. During this time, students rotate through several services, e.g., General Surgery, Gynecology, Urology, E.N.T., Orthopedics, Plastics, Ophthalmology, and have observational experiences in neurosurgery and cardiovascular surgery.

Clinical experiences are scheduled in major Toronto hospitals.

Phase III is two weeks in length. The focus is management of organization behaviour to prepare nurses to function as first-level supervisors. The content includes management theory based on a behavioural human-relations framework.

COURSES	16 WEEKS
ORN400	Operating Room Nursing — Theory and Labs
ORN401	Operating Room Nursing — Practicum
ORN407	ORN — Surgical Seminar/Management

For more information, call Virginia Warren at (416) 867-2000 ext. 2349 or 1 (800) 265-2002 between 9 a.m. and 3 p.m.

REGISTERED NURSE — PERINATAL INTENSIVE CARE

GBC Code NU4060
Nightingale Campus
15 Weeks (1 semester)
Apply to OCAS

Starting: September, January
Certification: Certificate
No summer classes

PREREQUISITES:

Current Certificate of Competence, College of Nurses of Ontario, or if from out-of-province, eligibility for registration in Ontario. Current nursing experience in the field of perinatology, i.e., obstetrics, nursery or N.I.C.U., would be an advantage; B.C.L.S., level C (approved by the Heart and Stroke Foundation). Brief résumé, George Brown medical report. Hepatitis B vaccination strongly recommended.

ABOUT THE PROGRAM:

This program prepares the registered nurse to provide comprehensive care to critically ill newborns and their families in an intensive care setting. The program will be offered through self-study modules and tutorials as well as clinical experience.

Theory includes:

- current concepts of perinatal nursing and high-risk pregnancy
- intervention available to critically ill infants with specific neonatal problems
- emotional care to the family of the high-risk newborn and to the health care provider

Practicum includes:

- observation in high-risk labour and delivery and antepartum units
- care of critically ill newborns
- use of advanced monitoring and diagnostic equipment
- operating room observation with pre- and post-op care
- participation with the transport team
- laboratory and x-ray interpretation
- care of the family of the critically ill infant

Clinical practice scheduled in neonatal intensive care unit.

COURSES	15 WEEKS
PER400	Perinatal Nursing — Theory
PER401	Perinatal Nursing — Clinical
PER402	Neonatal Intens Care NURS — Theory
PER403	Neonatal Intens Care NURS — Clinical

For information, call Heather Urquhart at (416) 867-2000 ext. 2351 or 1 (800) 265-2002 between 9 a.m. to 3 p.m.

ORTHOTIC/PROSTHETIC TECHNICIAN

GBC Code DE1100
Casa Loma Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:

Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 11 and/or 12 physics and biology.

Qualified applicants will have a manual dexterity test and will be interviewed prior to the fourth Saturday in April.

ABOUT THE PROGRAM:

This technical program is for people who are craft-oriented but not interested in the clinical aspects of orthotics/prosthetics. Under the direction of the orthotist/prosthetist, students learn how to make orthoses (braces and splints) and prostheses (artificial limbs), which are fitted to help rehabilitate disabled patients. It is a field in which new materials, techniques and controls are creating an increasing demand for technically competent people.

Graduates will be eligible for registration by the Canadian Association of Prosthetists and Orthotists. For an information appointment about this program, please call (416) 242-4864.

This program is unique in Ontario.

CAREER PROSPECTS:

Excellent employment opportunities are available in hospitals, rehabilitation centres and private facilities across the country.

JOB DESCRIPTIONS:

The orthotic technician makes orthoses from drawings, measurements and plaster casts using a variety of materials, such as metals, plastics, leathers and fabrics.

The prosthetic technician makes prostheses from drawings, measurements and plaster casts using a variety of materials, such as metals, plaster and leather.

SEMESTER 1	16 WEEKS
PROS102	Materials and Laboratory Techniques
ENDR124	Basic Drawing and Machine Shop
WELD147A	Welding Techniques for Orthotics Prosthetics Technicians
ANAT130	Anatomy/Physiology
KIN100	Kinesiology I
PROS103	Fabrication Theory
COMM120	College English

SEMESTER 2	18 WEEKS
PROS112	Materials and Laboratory Fabrication Techniques
PROS103	Fabrication Theory
PROS105	Material Technology
ANAT131	Anatomy/Physiology II
KIN110	Kinesiology II
LIBS132	Being Human: Self, Society and Meaning

SEMESTER 3	16 WEEKS
PROS205	Materials and Laboratory Techniques
PROS205	Externally Powered Orthotics Prosthetics
ENG205	Language and Communications
PROS206	Fabrication Theory
PRGM120	Intro to Computers
KIN106	Kinesiology/Biomechanics for Technicians
PROS208	Pre-Graduate Work Experience I

SEMESTER 4	18 WEEKS
PROS215	Materials and Laboratory Techniques
PROS212	Professional Issues in Orthotics Prosthetics
PROS210	Pre-Graduate Work Experience II
PROS216	Fabrication Theory
KINE112	Kinesiology and Biomechanics for Technicians
PROS211	Advanced Material and Orthotics Prosthetics Techniques

For more information or if you are applying to this program, call David Preston at (416) 242-4864 between 9 a.m. and 3 p.m.

$ YOUR PROGRAM MAY OFFER A BURSARY OR SCHOLARSHIP.

Contact your Program Coordinator or the Financial Assistance Office to find out.

CLINICAL METHODS IN ORTHOTICS/PROSTHETICS (POST DIPLOMA)

GBC Code DE1120
Casa Loma Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:

This is a post-diploma/post-degree program. Graduates from the Orthotics/Prosthetics technical program, graduates in kinesiology, physiotherapy, physical education, engineering, nursing and other related backgrounds will be considered as suitable applicants. An initial prescreening testing process will take place in late March or early April. Qualified applicants will be interviewed.

ABOUT THE PROGRAM:

The two-year program is co-ordinated between George Brown College and West Park Hospital, with associate clinics at Chedoke-McMaster Hospital and the Canadian Centre for Prosthetics. Students will be trained in making and fitting prostheses (artificial limbs) and orthoses (braces and splints).

Students obtain clinical experience under the direction of certified prosthetists/orthotists.

This program will appeal to students, especially those who have a background in health sciences, who are interested in working with people and helping patients in their attempts to overcome disabilities.

Graduates will be eligible for certification by the Canadian Board for Certification of Prosthetists and Orthotists. For further information call (416) 242-4864.

This program is unique in Ontario.

CAREER PROSPECTS:

Employment is available in orthotic and prosthetic management at hospitals, rehabilitation centres and private facilities throughout Canada.

SEMESTER 1	16 WEEKS
CT102A	Orthotics/Prosthetics Clinical (Theory) I
LAB104A	Orthotics/Prosthetics Laboratory Procedures I
CT103A	Applied Orthotics/Prosthetics Clinical Techniques I
ANAT132	Anatomy for Orthotics/Prosthetics I
KINE102	Kinesiology and Biomechanics

SEMESTER 2	18 WEEKS
CT112A	Orthotics/Prosthetics Clinical Theory II
CT113A	Applied Orthotics/Prosthetics Techniques II
LAB114A	Orthotics/Prosthetics Laboratory Procedures II
ANAT134	Anatomy for Orthotics/Prosthetics II
PHYS107A	Physiology for Orthotics/Prosthetics

SEMESTER 3	16 WEEKS
CT202A	Orthotics/Prosthetics Clinical Theory III
CT203A	Applied Orthotics/Prosthetics Clinical Techniques III
LAB203A	Orthotics/Prosthetics Laboratory Procedures III
PATH211A	Pathophysiology for Orthotics/Prosthetics I
KINE206	Prosthetics & Orthotic Case Studies
CT204	Powered Prosthetics

SEMESTER 4	18 WEEKS
CT212A	Orthotics/Prosthetics Clinical Theory IV
LAB213A	Orthotics/Prosthetics Laboratory Procedures IV
CT213A	Applied Orthotics/Prosthetics Clinical Techniques IV
PATH221A	Pathophysiology for Orthotics/Prosthetics II
BUS276A	Practice Management and Professional Issues in Orthotics/Prosthetics

For more information or if you are applying to this program, call Dan Blocka at (416) 242-4864 between 9 a.m. and 3 p.m.

PRE-HEALTH SCIENCE

GBC Code PH7000
St. James Campus
16 Weeks (1 semester)
Apply to OCAS

Starting: September, January
No summer classes

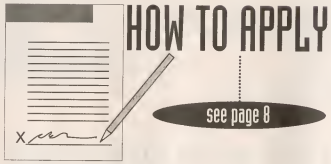
PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7).

ABOUT THE PROGRAM:
The Pre-Health Science program is offered through the Faculty of Academic Studies and Resources and has been established for people who want to enter a post-secondary health science program but do not have all the admission requirements. It offers necessary background in English, mathematics, social sciences and basic sciences.

Graduates of the program who wish to enter full-time programs in health-related sciences must apply through the normal selection process. In some programs, such as Nursing, students who achieve satisfactory academic standing in Pre-Health Science will be guaranteed admission after they have applied.

COURSES	16 WEEKS
ENG700	Language and Communicatians
MATH700	Mathematics for Pre-Health
PHY700	Physics for Pre-Health
CHEM700	Chemistry for Pre-Health
BIO700	Biology for Pre-Health
LIBS700	Introduction to Sociology and Human Relations

For more information, call (416) 867-2000 ext. 2196 between 8 a.m. and 4 p.m.



HOSPITALITY CENTRE

Dean:
Brian Cooper

Chairs:
Dan Borowec
Academic

Dorothy Ellis
Administrative

The George Brown College Hospitality Centre is Canada's largest and most diversified culinary and hospitality training facility with more than 20 specialized management, apprenticeship and tuition-short programs. Centrally located in the heart of Canada's restaurant and hotel capital, it provides a centre of life-long learning for more than 1,800 full-time and 3,000 part-time students in its state-of-the-art hospitality building.

Students take part in industry externships or placements as part of a skill-oriented curriculum that is nurtured by more than 80 of the world's finest training chefs, pastry chefs, hospitality managers and tradespersons.

Students can progress through a variety of programs while at George Brown by combining blocks of specific curriculum. This leads to a variety of options for our students.

Several programs are unique to Canada. These include programs such as Chinese Cuisine and Chef Pre-Employment and post-diploma programs such as Culinary Arts Italian (with a three-month placement in Italy), Food Service Supervisor (a one-year program leading to supervisory positions in the retirement home and health care industry), Patissier (Advanced Pastry Work) and Sommelier (Canada's only certified wine appreciation and service program). Many of hospitality's part-time continuing education courses count towards full-time certificate and diploma programs as well.

Our keen hospitality students often work part-time at some of the city's best hotels and restaurants while attending classes. Special events, student/industry associations and on-campus clubs, plus regular guest speakers and guest chefs, make the Centre of Hospitality a unique learning experience. For further information and appointments, phone (416) 867-2225.

BAKING TECHNIQUES

GBC Code FS5410
St. James Campus
40 Weeks (2 semesters)
Apply to GBC

Starting: Fall
Certification: Certificate
No summer classes

PREREQUISITES:
Grade 10 (with credits at or above general level) or equivalent, or mature student status (see page 7) and a pre-entrance orientation session.

ABOUT THE PROGRAM:
This program prepares students for a career in the international baking industry. It is segmented into specific skill sections that include breads, pastry, cakes and decorating. Each section deals with the practical methods and the theoretical background of a particular specialty. The sections are rounded out with sanitation, nutrition, business communications and mathematics. Students will complete an externship (work experience) as part of the program.

Students may be eligible for sponsorship for the advanced portion of the program by the college's local apprenticeship committee for the trade of baker.

CAREER PROSPECTS:
This program covers the entire baker apprentice in-school work. Graduates may become apprentice bakers with credit hours towards their professional certification. Alternatively, they may take positions in commercial bakeries, large hotels and institutions or small bakery shops concentrating in one of several specialist aspects of baking.

ADVANCED STANDING:
Graduates may qualify to take a Patissier program at George Brown College following work experience. Call the Hospitality Centre for more details.

SAN531	Sanitation Safety
NUT513	Nutrition
MATH511	Mathematics
ENG511	Language and Communications
BKT517	Cake Theory
BK517	Cake Craft
BKT518	Cookie Theory
BK518	Cookie Craft
BKT516	Pastry Theory
BK516	Pastry Craft
BKT515	Bread Theory
BK515	Bread Craft
BKT519	Decorating Theory
BK519	Decorating Craft
BKM510	Ingredient Projects
BKM540A	Bakery Management

For more information, call the Hospitality Centre at (416) 867-2225 between 9 a.m. and 4 p.m.

PART-TIME AND EVENING COURSES
Call 867-2464 or 1-800-263-8995

CHEF TRAINING (PRE-EMPLOYMENT)

GBC Code FS7420
St. James Campus
34 Weeks
Apply to OCAS

Starting: September, January
Certification: Certificate
Summer classes with January intake

PREREQUISITES:
Ontario Secondary School Diploma with credits in Grades 11 and 12 at or above the general level, or mature student status (see page 7). Qualified applicants are invited to attend an orientation session.

ABOUT THE PROGRAM:
This program provides the complete in-school portion of the apprentice cook certification program. Graduates will be considered for direct entry into the 3rd semester of the Culinary Management program with the addition of accounting or direct entry into the Culinary Arts — Italian program with acceptable experience.

This program is equivalent to the in-school requirements of the provincial apprenticeship basic and advanced program. Graduates receive total credit for their hours when they register as an apprentice cook.

The program includes food theory classes covering all aspects of food products and preparation, and demonstrations by experienced, qualified chefs on how to prepare food items, followed by hands-on preparation by students using small- and large-quantity recipes to produce dishes used by our cafeterias and formal dining room.

These subjects are broadened by study in related areas such as sanitation, nutrition, kitchen management, and food, beverage and labour cost control. These provide a background that a student may use to understand and successfully work in the wide variety of contemporary industry kitchens. Students will complete an externship in Toronto's leading training restaurants, hotels or catering establishments as part of their program.

CAREER PROSPECTS:
Graduates of this program will find excellent opportunities for employment in all areas of the food service industry, including hotel kitchens, restaurants, institutions, and commercial and industrial catering organizations.

ADVANCED STANDING:
Students may qualify for second year Culinary Management and Culinary Arts — Italian (post-diploma) program.

SEMESTER 1	16 WEEKS
BKT701	Bake Theory
BK701	Techniques of Baking
FSQ701	Culinary Techniques — Basic
FLQ701	Quantity Food Preparation
MATH735	Business Mathematics
NUT731	Basic Nutrition
FTC701	Food Theory — Basic
PUR705	Kitchen Management
SAN730	Sanitation, Safety and Equipment
GENED705	General Education

SEMESTER 2	18 WEEKS
BK702	Pastry, Dessert and Related Theory
FTC702	Food Theory — Advanced
FSQ702	Culinary Techniques Advanced
FLQ702	Cuisine à la Carte
MATH735	Business Mathematics
FC742	Food, Beverage/Labour Control
HOSP702	Hospitality Computer Concepts I
CWE101	Work Experience — Externship
ENG710	Language and Communications

(Specific courses will not necessarily be offered in the semester indicated.)

For more information, call the Hospitality Centre at (416) 867-2225 between 9 a.m. and 4 p.m.

YOUR PROGRAM MAY OFFER A BURSARY OR SCHOLARSHIP.
Contact your Program Coordinator or the Financial Assistance Office to find out.

CHINESE COOKING (BASIC)

GBC Code FS5770
St. James Campus
12 Weeks
Apply to GBC

Starting: Various times throughout the year
Certification: Certificate
No summer classes

PREREQUISITES:
Grade 10 with a pre-entrance orientation session with a college staff member and Chinese restaurant community representative.

ABOUT THE PROGRAM:
This program prepares students for careers as cooks in Chinese restaurants. It teaches the food preparation, kitchen supervision and theoretical methods to meet the needs of various styles of Chinese cuisine. Students prepare regional specialties such as Dim Sum, Cantonese cuisine, Szechuan cuisine, barbecue and chop suey type dishes in our Chinese-style food laboratory. Each practice session is preceded by a demonstration and discussion of specific methods conducted by a noted expert in that particular field. Cantonese terms are used throughout the course to describe ingredients and cooking methods. If the entire class is fluent in Cantonese, the class may be taught in that language.

CAREER PROSPECTS:
Graduates are employed as third, second and first cook and, with experience, chef in a variety of Chinese restaurants. This program is actively supported by the Ontario Chinese Restaurant Association.

COURSES	12 WEEKS
SAN577	Sanitation
FTF577	Food Theory
MENU577	Menu Planning
FP534	Cantonese Preparation
FP535	Dim Sum Preparation
FP536	Chap Suey and Food Preparation
FP537	Szechuan Preparation
MATH577	Mathematics
ENG577	Communications
CWE509	Work Experience

For more information call Bill Wang at (416) 867-2000 ext. 2250 between 9 a.m. and 4 p.m.

CHINESE COOKING (ADVANCED)

GBC Code FS5780
St. James Campus
12 Weeks
Apply to GBC

Starting: Various times throughout the year
Certification: Certificate
No summer classes

PREREQUISITES:
Successful completion of Chinese Cooking (Basic) program and work experience.

ABOUT THE PROGRAM:
This program continues and elaborates on the skills acquired in the basic program and in the work experience. It reinforces the practical sessions on advanced food preparation by discussion of food storage, purchasing and receiving, recipe costing, portion control and yields, human relations, market evaluation, hospitality law and Chinese kitchen layouts. Cantonese terms are used throughout the course to describe ingredients and cooking methods. If the entire class is fluent in Cantonese, the class may be partially taught in that language.

CAREER PROSPECTS:
Graduates are employed as third, second and first cook and, with experience, chef in a variety of Chinese restaurants. This program is actively supported by the Ontario Chinese Restaurant Association.

These programs are unique in Ontario.

COURSES	12 WEEKS
SAN578	Sanitation
FTF578	Food Theory
PUR578	Kitchen Management
FP544	Cantonese Preparation
FP545	Dim Sum Preparation
FP548	Barbecue Preparation
FP549	Chap Suey Preparation
FP547	Szechuan Preparation
CWE510	Work Experience

Students will complete a compulsory externship in a recognized Chinese restaurant between the basic and advanced program.

For more information call Bill Wang at (416) 867-2000 ext. 2250 between 9 a.m. and 4 p.m.

CULINARY ARTS — ITALIAN (POST DIPLOMA)

GBC Code FS4020
St. James Campus
33 Weeks (2 semesters)
Apply to OCAS

Starting: September
Certification: Certificate
No summer classes

PREREQUISITES:
Applicants must have graduated from a two-year Culinary Management program, an Advanced Food Preparation program, an Advanced Apprentice Cook program or Chef Pre-Employment, and they must have one year of acceptable work experience. Throughout the program students are expected to work part-time in an Italian restaurant kitchen.

ABOUT THE PROGRAM:
This program provides graduate cooks with the opportunity to study the culture, art and wines of Italy, as well as its many regional cuisines. Students combine a four-day-per-week, in-college skill development program with on-the-job practical experience in Toronto Italian restaurants. The final 15 weeks of the program will be an externship arranged by our Italian Advisory Committee in the finest Italian restaurants of Italy, San Francisco or New York. Students actively participate in specialty fundraising events with the Italian restaurant community to assist in sponsoring their travel to and from Italy.

This program is unique in Canada.

CAREER PROSPECTS:
Successful graduates will find employment in one of the many Italian specialty restaurants, or use the experience to enhance their repertoire of special menus for large hotels or institutions.

SEMESTER 1	18 WEEKS
CUL400	Dimensions of Italian Culture and Language
FTC400	Italian Culinary Theory
VIN400	Italian Wines
MENU401	Italian Menu Development
FP400	Italian Food Preparation Techniques
FSQ400	Italian Small Quantity Food Prep/Lab
BK400	Italian Baking and Dessert Craft
SERV400	Italian à la Carte Kitchen and Dining Service

SEMESTER 2	15 WEEKS
CWE401	Work Experience — Externship

For more information, call Ivana Zambotti at (416) 867-2247 between 9 a.m. and 4 p.m.

NOT SURE YOU QUALIFY?
see page 6

CULINARY MANAGEMENT

GBC Code FS1060
St. James Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits in Grades 11 and 12 at or above the general level) or equivalent, or mature student status (see page 7). Qualified applicants are invited to attend an orientation session.

Graduates of Chef Pre-Employment, Basic and Advanced Food Preparation or an apprentice cook program qualify for direct entry into the second year.

BACKGROUND:
Credits in bookkeeping and business mathematics are useful.

ABOUT THE PROGRAM:
The Culinary Management program provides training in all aspects of food preparation, cooking and presentation to international standards. Graduates are well versed in kitchen organization and management. The program includes periods of work experience with top Ontario chefs.

Successful candidates complete the in-school portion of the basic and advanced apprentice cook program with the subsequent hours of credit.

After two years of work in the industry, graduates are eligible to write the professional certification examination for the trade of journeyperson cook.

CAREER PROSPECTS:
Career opportunities in the field of professional food preparation are excellent. Graduates find employment in large hotels and food operations as well as in more intimate restaurants and clubs.

JOB DESCRIPTIONS:
Chef de Partie — Reporting directly to the sous (assistant) chef, the chef de partie is responsible for the operation of a major department (partie) within a large kitchen organization including the ordering and preparation of food, quality control, cost control and the supervision of staff.

Sous Chef — Reporting directly to the executive chef, the sous chef is responsible for the day-to-day preparation of food and the supervision of staff for all departments within the kitchen, ensuring that the food prepared meets the standards set by the establishment in quality and cost. The sous chef is also fully responsible for the kitchen in the absence of the executive chef.

ADVANCED STANDING:
Students who successfully complete this program may be exempted from courses in Ryerson Polytechnic University's Bachelor of Applied Arts program in Hospitality and Tourism Management. This program also qualifies students for additional hours towards provincial certification as a cook. Graduates may take the Food Service Supervisor or Culinary Arts — Italian.

SEMESTER 1	16 WEEKS
FTC101	Food Theory — Basic
FSQ101	Culinary Techniques — Basic
FLQ101	Quantity Food Preparation
BKT101	Bake Theory
BK101	Techniques of Baking
SAN100	Sanitation, Safety and Equipment
MATH111	Business Mathematics
PUR104	Kitchen Management
MARK203	Marketing I
ACC109	Accounting I
GENED105	General Education

SEMESTER 2	18 WEEKS
FTC102	Food Theory — Advanced
FSQ102	Culinary Techniques — Advanced
FLQ102	Cuisine à la Carte
BK102	Pastry, Dessert and Related Theory
NUT102	Basic Nutritian
FC104	Food, Beverage and Labour Cantral
ENG107	Business Communicatian
ACC110	Accounting II
CWE101	Wark Experience — Externship

SEMESTER 3	16 WEEKS
FTC203	Food Theory
FLQ205	Food Preparatian Garde Manger
FLQ203	Internatianal Cuisine à la Carte
BK203	Advanced Pastry Skills I
LAW204	Law
MARK208	Marketing II
ACC207	Financial Management
HOSP202	Haspitality Camputer Projects

SEMESTER 4	18 WEEKS
VIN201	Wines
FSQ203	Culinary Techniques Internatianal
BK204	Advanced Pastry Skills II
PERS202	Human Resaurces
MP201	Management Projects
MARK209	Marketing III
CWE203	Wark Experience
HOSP205	Supervisian
HOSP207	Financial Management

(Specific caurses will nat necessarily be offered in the semester indicated.)

For mare information, call the Haspitality Centre at (416) B67-2225 between 9 a.m. and 4 p.m.

FOOD AND BEVERAGE MANAGEMENT
(RESTAURANT MANAGEMENT)

GBC Code FS1070
St. James Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma with credits in Grades 11 and 12 at or above the general level, or mature student status (see page 7). Qualified applicants are invited to attend an orientation session.

BACKGROUND:
Credits in bookkeeping and business mathematics are useful.

ABOUT THE PROGRAM:
The food industry is the most rapidly expanding service sector of Canada's economy. In 1992, it offered more than 90,000 new jobs.

Fascinating opportunities exist in restaurants; commercial, social and industrial catering; airline food service; health care facilities; hotels; resorts and fast food operations.

Students graduate with thorough training in practical and management skills, using modern facilities that include a fully equipped bar, food preparation stations and a private licensed dining lounge.

As well as the latest innovations in food service management, students learn banquet catering, food and beverage control, restaurant accounting, nutrition and personnel management.

The college has externship programs with many of Ontario's top restaurants and catering establishments.

CAREER PROSPECTS:
Graduates can look forward to positions in restaurants, institutions and catering companies at the mid-management level. Many begin their careers as management trainees, spending approximately six months working in a variety of positions before promotion to department head, assistant manager or possibly manager of a food service operation.

JOB DESCRIPTIONS:
Management Trainee — Works in all departments of a restaurant operation from food preparation to accounting, learning all aspects of the business from the administrative point of view.

Manager — Responsible for the complete operation of a restaurant or food service facility, from supervising employees to maintaining excellent customer relations.

Food and Beverage Manager — Responsible for one of the most challenging departments within a large food service operation or hotel. The position includes responsibility for training and supervising staff, planning menus, cost control, sanitation and an excellent food production system.

Owner — Often having started out with small fast-food or specialty restaurants, many of our graduates own and operate successful food operations.

ADVANCED STANDING:
Students who successfully complete this program may be exempted from courses in Ryerson Polytechnic University's Bachelor of Applied Arts program in Hospitality and Tourism Management. Graduates may also qualify for exemptions in other hospitality programs at George Brown.

SEMESTER 1	16 WEEKS
FTC101	Faad Theary — Basic
FSQ101	Culinary Techniques — Basic
SAN100	Sanitatian, Safety and Equipment
MATH110	Business Mathematics
SERV103	Faad and Beverage Service I
MARK105	Marketing I
PUR104	Kitchen Management
ACC103	Accounting I
ENG139	Business Cammunicatians I
HOSP103	Haspitality Camputer Cancepts
GENED105	General Education

SEMESTER 2	18 WEEKS
FTC102	Faad Theary — Advanced
FSQ102	Culinary Techniques Advanced
FC104	Food, Beverage and Labour Cantral
ENG149	Business Cammunicatians II
MIX103	Mixalagy
SERV113	Faad and Beverage Service II
ACC110	Accaunting II
CWE102	Wark Experience — Externship
DIM101	Dimensians af Taurism

SEMESTER 3	16 WEEKS
FLQ203	Internatianal Cuisine à la Carte
MARK208	Marketing II
PERS202	Human Resaurces
ACC207	Financial Management
HOSP202	Haspitality Camputer Projects
HOSP205	Supervisian
NUT102	Nutritian

SEMESTER 4	18 WEEKS
LAW216	Law and Security
VIN201	Wines
MARK209	Marketing III
SERV206	Canventian and Banquet Service
SERV207	Advanced Faad and Beverage Services
MP201	Management Projects
CWE203	Wark Experience
NEW	Bar Management
HOSP207	Financial Management II

(Specific caurses will nat necessarily be offered in the semester indicated.)

For mare infarmatian, call the Haspitality Centre at (416) B67-2225 between 9 a.m. and 4 p.m.

FOOD PREPARATION/GENERAL (BASIC)

GBC Code FS5730
St. James Campus
20 Weeks
Apply to GBC

Starting: Every 20 weeks
Certification: Certificate
Summer classes, depending on start date

PREREQUISITES:
Grade 10 (with credits at or above general level) or equivalent, or mature student status (see page 7), and a pre-entrance orientation session.

ABOUT THE PROGRAM:
The program includes food theory classes covering all aspects of food product preparation, with demonstrations by experienced qualified chefs on how to prepare food items, followed by hands-on preparation by students using small and large quantity recipes to produce dishes used by our cafeterias and formal dining room.

These subjects are broadened by study in related areas such as sanitation, nutrition, kitchen management and food cost control. These provide a background that a student may use to understand and successfully work in the wide variety of contemporary industry kitchens.

CAREER PROSPECTS:
Graduates of this program will find excellent opportunities for employment in all areas of the food service industry, including hotel kitchens, restaurants, institutions, and commercial and industrial catering organizations.

Students who successfully complete this program may be given direct entry into the advanced-level program or enter the industry with 450 credit hours granted towards their professional designation as a journeyperson cook.

ADVANCED STANDING:
This is a foundation course that can lead to all hospitality diploma programs. (Students must complete the Food Preparation/General Basic and Advanced programs to receive the in-school portion of their apprenticeship.)

COURSES	20 WEEKS
BKT501	Bake Theory
BK501	Techniques of Baking
ENG501	Language and Communications
FSQ501	Culinary Techniques — Basic
FLQ501	Quantity Food Preparation
MATH501	Mathematics
NUT501	Basic Nutrition
FTC501	Food Theory — Basic
PUR505	Kitchen Management
DIM501	Dimensions of Tourism
SAN500	Sanitation, Safety and Equipment

Students will complete an externship in Taranto's leading training restaurants, hotels or catering establishments as part of their program.

For mare infarmatian, call the Haspitality Centre at (416) 867-2225 between 9 a.m. and 4 p.m.

FOOD PREPARATION/GENERAL (ADVANCED)

GBC Code FS5740
St. James Campus
20 Weeks
Apply to GBC

Starting: Every 20 weeks
Certification: Certificate
Summer classes, depending on start date

PREREQUISITES:
Grade 10 (with credits at or above general level) or mature student status (see page 7) and successful completion of Food Preparation Basic.

ABOUT THE PROGRAM:
This program completes the requirements for the in-school portion of the journeyperson cook certificate. Graduates are urged to enter the industrial training section of the apprenticeship program, for which they have hours credited.

Graduates may be considered for direct entry into the 3rd semester of the Culinary Management program, if they obtain credits in accounting and computer concepts.

CAREER PROSPECTS:
Excellent career opportunities are available in hotel restaurants, clubs and institutions as a cook. Graduates can progress to positions of head cook, chef or kitchen manager.

ADVANCED STANDING:
Graduates of this program receive up to 450 hours towards their certification of qualification for the trade of cook. Students who successfully complete this program may enter the Food and Beverage Management, Culinary Management, and Culinary Arts — Italian programs with exemptions.

COURSES	20 WEEKS
BKT502	Bake Theory
BK502	Pastry and Desserts
FTC502	Food Theory — Advanced
FSQ502	Culinary Techniques — Advanced
FLQ502	Cuisine á la Carte
FC504	Food, Beverage and Labour Control
ENG502	Language and Communications

Students will complete an externship in Taranto's leading restaurants, hotels or catering establishments as part of their program.

For mare infarmatian, call the Haspitality Centre at (416) 867-2225 between 9 a.m. and 4 p.m.

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see inside back cover

FOOD SERVICE AND BARTENDING

GBC Code FS5760
St. James Campus
20 Weeks
Apply to GBC

Starting: Every 10 weeks
Certification: Certificate
Summer classes, depending on start date

PREREQUISITES:
Grade 10 (with credits at or above general level) or mature student status (see page 7) and a pre-entrance orientation session.

ABOUT THE PROGRAM:
This 20-week program integrates the skills of food and beverage service techniques over two 10-week blocks.

The theory and practical, hands-on skills of food service are taught in a formal dining room where students are required daily to serve five-course meals. Skills are built gradually, moving from the basic to the more complex. Bartending is taught in a modern, 22-station mixology laboratory with theory and hands-on practice combined. Sanitation and dimensions of the industry round out Module I. Module II provides introductions to marketing, restaurant accounting procedures, wine appreciation and advanced service such as flambé work and food preparation at the tableside.

CAREER PROSPECTS:
Graduates find positions in table service in large and small restaurants or food service operations from fast-food areas to fine formal dining rooms. In addition, the skill of bartending will allow the extra flexibility to obtain a position as a bartender in bars, taverns, discos and clubs.

ADVANCED STANDING:
This is a foundation course that enables students to transfer credits to Hotel Management, and Food and Beverage Management programs.

SEMESTER 1	10 WEEKS
SAN576	Sanitation and First Aid
MIX576	Mixology
SERV576	Dining Room Organization I
SERV577	Basic Dining Room Service I
MATH576	Business Mathematics
ENG576	Business Communications

SEMESTER 2	10 WEEKS
LAW576	Hospitality Law
ACC576	Hospitality Accounting Procedures
MIX586	Mixology
VIN576	Wines
SERV586	Dining Room Organization II
SERV587	Dining Room Service II
CWE576	Work Experience — Externship

Work Experience is offered during the second semester of the program. It will replace two weeks of regular classes on a rotating basis.

For more information, call the Hospitality Centre at (416) 867-2225 between 9 a.m. and 4 p.m.

FOOD SERVICE SUPERVISOR (POST DIPLOMA)

GBC Code FS4010
St. James Campus
33 Weeks
Apply to OCAS

Starting: September
Certification: Certificate
No summer classes

PREREQUISITES:
Applicants must have successfully completed either a two-year hospitality management program from an Ontario community college or completed the equivalent of basic and advanced apprentice cooking programs and selected management subjects. Candidates must attend an orientation and selection process.

ABOUT THE PROGRAM:
There is a critical need for certified food service supervisors in health-care facilities across Ontario and Canada. With the dramatic growth of retirement, extended care and nursing homes, as well as hospitals and health-care facilities catering to Canada's rapidly growing senior population, graduates of hospitality management programs are attracted to this well-paid, fulfilling and demanding occupation.

George Brown's one-year program is tailored to the food service and hospitality graduates of Ontario colleges. This post-diploma program includes courses in Applied Food Chemistry, Physiology, Therapeutic Diets, Psychology, Advanced Nutrition, Sanitation and Safety, in addition to expanded Financial Management and Human Relations courses of the existing common core hospitality programs offered at George Brown and other Ontario colleges.

The program combines in-school instruction with compulsory clinical and administrative field work placements.

CAREER PROSPECTS:
Graduates will qualify to write the Canadian Society of Nutrition Management examination. Membership in the C.S.N.M. is a prerequisite to hold a supervisory position in a provincially accredited health-care facility.

SEMESTER 1	15 WEEKS
PHY402	Basic Physiology
NUT404	Advanced Nutrition
SAN402	Infection Control and Safety
ENG402	Communications
MENU402	Menu Planning II
FBM402	Therapeutic Diets

SEMESTER 2	18 WEEKS
FBM402	Therapeutic Diets
PSY404	Introduction to Psychology
TECH402	Supervisory Techniques
FCH404	Experimental Applied Food Chemistry
FC404	Operational Controls
ENG402	Communications
FSF401	Food Service Facilities
CWE402	Field Placement

(Specific courses will not necessarily be offered in the same semester indicated.)

For more information, call the Hospitality Centre at (416) 867-2225 between 9 a.m. and 4 p.m.

YOUR PROGRAM MAY OFFER A BURSARY OR SCHOLARSHIP.
Contact your Program Coordinator or the Financial Assistance Office to find out.

HOTEL MANAGEMENT

GBC Code FS1080
St. James Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma with credits in Grades 11 and 12 at or above the general level, or mature student status (see page 7). Qualified applicants are invited to attend an orientation session.

BACKGROUND:
Credits in bookkeeping and business mathematics are useful.

ABOUT THE PROGRAM:
Highly skilled management is vital to the efficient operation of modern hotels. The hotel industry is a round-the-clock business and it needs men and women who are prepared to meet the challenges it offers.

Students in Hotel Management learn practical skills in the most modern facilities available, including a fully equipped bar, food preparation stations, a private, licensed dining lounge and a front desk classroom with models of hotel operations.

In the well-established work experience training program, students may spend time with the department heads of world-famous Canadian hotels learning, under expert supervision, what the hotel industry is all about.

A special Hotel Management section is available to qualified international students.

CAREER PROSPECTS:
Graduates can look forward to a variety of positions within a hotel, such as front office, sales, catering, beverage control, accounting, personnel or purchasing as well as the potential for careers in the closely related food service industry.

JOB DESCRIPTIONS:
Front Office and Reception — The front office processes reservations, registers the guests, assigns rooms, handles complaints and provides information on all hotel services.

Sales — The salesperson visits local and out-of-town business executives, offering the hotel's guest rooms, banquet halls and seminar rooms for conventions and meetings.

Beverage — The food and beverage manager supervises all preparation and service staff, ensuring that all dining rooms and lounges are operating efficiently and profitably while maintaining high standards of food, beverage and service.

Banquets — The banquet manager supervises the setup and service of banquets, weddings, receptions, meetings and conventions.

Accounting — The food and beverage controller compiles cost and profit statistics, prices and menus, forecasts business trends and reports to management on cost-saving measures.

ADVANCED STANDING:
Students who successfully complete this program may be exempted from courses in Ryerson Polytechnic University's Bachelor of Applied Arts program in Hospitality and Tourism Management, and a variety of programs in George Brown's Hospitality Centre.

SEMESTER 1	16 WEEKS
FTC101	Food Theory — Basic
FSQ101	Culinary Techniques — Basic
SAN100	Sanitation, Safety and Equipment
MATH110	Business Mathematics
SERV103	Food and Beverage Service I
PUR104	Kitchen Management
HK201	Housekeeping
ACC103	Accounting I
ENG139	Business Communications I
GENED105	General Education Foundation

SEMESTER 2	18 WEEKS
NUT102	Nutrition
FOP201	Front Desk Procedure
MIX103	Mixology
MARK105	Marketing
DIM101	Dimensions of Tourism
FC104	Food, Beverage and Labour Control
ENG149	Business Communications II
SERV113	Food and Beverage Service II
HOSP103	Hospitality Computer Concepts
ACC110	Accounting II
CWE102	Work Experience — Externship

SEMESTER 3	16 WEEKS
FOO202	Front Office Operations
MARK208	Marketing II
PERS202	Human Resources
ACC207	Financial Management
VIN201	Wines
HOSP202	Hospitality Computer Projects
HOSP209	Hotel Sales

SEMESTER 4	18 WEEKS
LAW216	Law and Security
MARK209	Marketing III
SERV206	Convention and Banquet Service
MP201	Management Projects
CWE203	Work Experience
HOSP205	Supervision
HOSP207	Financial Management

(Specific courses will not necessarily be offered in the semester indicated.)

For more information, call the Hospitality Centre at (416) 867-2225 between 9 a.m. and 4 p.m.

RETAIL MEAT CUTTING

GBC Code FS5440
St. James Campus
20 Weeks
Apply to GBC

Starting: At various times throughout the calendar year
Summer classes, depending on start date

PREREQUISITES:
Grade 10 (with credits at or above general level) or mature student status (see page 7). High standards of personal hygiene. Pre-entrance orientation session.

ABOUT THE PROGRAM:
At George Brown College, we have the most complete meat cutting laboratories, staffed by several of the best-known meat cutters in the industry.

Working in refrigerated meat laboratories, students divide their activity between industry meat production and private customer orders, which account for thousands of dollars of meat purchases annually. This permits students to have comprehensive hands-on work experience, which develops their speed, accuracy and self-confidence before moving into the industry.

The in-school portion of training offers all subjects required for the apprentice meat cutter, such as meat cutting practice, theory of meats, business procedures, business mathematics and written communications.

This program is unique in Metro Toronto.

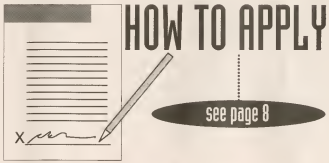
CAREER PROSPECTS:
Professional meat cutters are employed by independent meat stores, chain store meat departments, hotel and restaurant portion control supply houses, and catering organizations.

Graduates of this program, because of their skill and immediate value to an employer, usually experience little difficulty in finding an employer of their choice. Graduates may qualify to write the professional certification examination for retail meat cutting.

COURSES	20 WEEKS
ENG539	Language and Communications
MT544	Business Procedure
MATH535	Business Mathematics
MC533	Practical Meat Cutting
MCT533	Trade Theory
SAN500	Sanitation and Safety

Students will also complete an industry externship as part of the program.

For more information, call the Retail Meat Cutting office at (416) 867-2000 ext. 2399 between 9 a.m. and 3 p.m.



FACULTY OF SCIENCE & TECHNOLOGY

Dean:
Patricia Groves (Acting)

Chairpersons:
Irene Adler
Skill Development, Administration

Doug Todd (Acting)
Construction Trades

William Houghton
Electrical/Electronics Engineering Technology

Don Williams (Acting)
Mechanical Systems

Paul Stevens
Computer Science & Engineering Technology

Louise Trudel-Kruithof
Architectural/Civil Engineering Technology

SCIENCE & TECHNOLOGY

The Faculty of Science and Technology is committed to providing the best possible learning environment for its students. The way in which we offer our quality, career-oriented education is an important part of this commitment.

On the following pages you'll see that some of our programs have their first year in common with others in the same general field. This means you don't have to make a final career choice until your second year. Similarly, you can register in a three-year program but take a break after successful completion of the first two years — when a technician diploma is awarded — and return later to complete the technology diploma.

You may opt to take a partial course load in one of your years at the college in order to work part-time or to give yourself more time for study.

You may take courses from any of the semesters listed for your program, as long as you have the prerequisites before registration. (For example, you must take Drafting 1 before taking Drafting 2.) Some of the graduation requirements may be completed by taking selected evening courses or by transfer of credits from other post-secondary institutions.

Your program chairperson will be pleased to assist you in planning your course of action. If you have any questions, please call the phone number listed on the program page.

AIR CONDITIONING/REFRIGERATION
ENGINEERING TECHNICIAN

GBC Code AR1010
Casa Loma Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 technical mathematics.

ABOUT THE PROGRAM:
During the last decade, air conditioning has developed into one of Canada's fastest growing industries. By pioneering specialized systems that heat, cool, humidify, circulate, filter and purify, it has contributed to achievements ranging from space travel to solar heating.

The student will gain a broad and intensive knowledge of the design, installation and operation of air conditioning systems in residential, commercial and industrial buildings. The program focuses closely on practices used in industry. Well-equipped laboratories reinforce the practical aspects of the subject matter. Graduates qualify for membership in the Ontario Association of Certified Engineering Technicians and Technologists (OACETT).

CAREER PROSPECTS:
System Design — The technician works with a professional engineer in calculating heat loads; in sizing piping, ducting and other equipment; in planning site layouts and preparing drawings.

Sales Promotion — The technician prepares estimates and drawings so that competitive quotations may be given and provides technical support to sales staff in answering engineering queries.

System Balancing — The technician plans and recommends, or carries out, adjustment to air distribution, air quantities and velocities in order to maintain air supplies at recommended design conditions.

Estimating — The technician investigates new construction contracts to determine how an employer's product may best be used. Material and cost lists are prepared that demand a specialized heating, ventilating and air conditioning (HVAC) knowledge.

ADVANCED STANDING:
Students who successfully complete this program may enter into the third year of the Air Conditioning/Refrigeration Engineering Technology program at George Brown. They may also qualify for some exemptions in engineering programs at Queen's University, Lakehead University and the University of Western Ontario.

SEMESTER 1	16 WEEKS
AIR111	Refrigeration Theory
AIR112	Heat Load Calculation
AIR113	Electrical Fundamentals
ARDR125	Drafting
AIR114	Laboratory Applications
MATH106	Mathematics
GENED	General Education

SEMESTER 2	16 WEEKS
HT105	Fuels Technology
AIR115	HVAC System Design
AIR116	Electrical Circuit Analysis
ARDR126	Drafting
PHY116	Applied Physics
COMM120	College English
GENED	General Education

SEMESTER 3	16 WEEKS
HT205	Fuels Technology
AIR205	HVAC System Design
AIR206	System Control
AIR216	Computer Applications
MATH206	Mathematics
COMM131-140	Communications Choices
GENED	General Education

SEMESTER 4	16 WEEKS
AIR207	Refrigeration Theory
AIR208	HVAC System Design
AIR209	System Control
ARDR226	Drafting
AIR210	Laboratory Applications
AIR211	Estimating
PHY208	Applied Physics
LIBS105-130	General Education Choices
GENED	General Education

For more information, call the co-ordinator at (416) 867-2000 ext. 4366 or Mechanical Systems Technology at (416) 867-2000 ext. 4360.

AIR CONDITIONING/REFRIGERATION
ENGINEERING TECHNOLOGY

GBC Code AR1200
Casa Loma Campus
3 Years (6 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 mathematics.

ABOUT THE PROGRAM:
High technology is having an impact on the heating, ventilating and air conditioning (HVAC) field. New opportunities are now arising in organizations for people with training beyond the two-year technician level. This program is intended to supplement the knowledge gained as a technician and to expand on those specialized areas for which industry is demanding higher levels of expertise, notably, at a junior engineer or technologist level. The program monitors industry practices for evaluating HVAC systems and design. Graduates qualify for membership in the Ontario Association of Certified Engineering Technicians and Technologists (OACETT).

CAREER PROSPECTS:
In addition to those offered at technician level:

System Design — Under the direction of an engineer the technologist will use the latest techniques in computer aided design programs for heating, ventilating and air conditioning (HVAC) systems, in estimating, sizing and equipment selection practices.

System Commissioning — The technologist checks all aspects of a complete HVAC system on start-up and carries out any control settings and balancing adjustments necessary to maintain correct distribution of conditioned air.

Project Coordinator — The technologist is the liaison between the engineering design team and site mechanics to ensure installation of equipment proceeds according to design requirements.

Building Management (Mechanical) — The technologist may direct other staff to ensure that all mechanical systems function in good order in a group of buildings, such as a high-rise apartment complex.

Testing and Research — The technologist is employed by organizations such as the Canadian Standards Association or the Canadian Gas Association, testing equipment and recommending improvements, before marketing permission is given.

Automatic Controls — The technologist is a team member in a controls manufacturing company, and is responsible for design, quality control and marketing of HVAC control systems, which often emphasize digital and microprocessor systems.

ADVANCED STANDING:
Students who successfully complete this program may qualify for some exemptions in engineering programs at Queen's University, Lakehead University and the University of Western Ontario.

SEMESTER 1	16 WEEKS
AIR111	Refrigeration Theory
AIR112	Heat Load Calculation
AIR113	Electrical Fundamentals
ARDR125	Drafting
AIR114	Laboratory Applications
MATH106	Mathematics
GENED	General Education

SEMESTER 2	16 WEEKS
HT105	Fuels Technology
AIR115	HVAC System Design
AIR116	Electrical Circuit Analysis
ARDR126	Drafting
PHY116	Applied Physics
COMM120	College English (or COMM107A)
GENED	General Education

SEMESTER 3	16 WEEKS
HT205	Fuels Technology
AIR205	HVAC System Design
AIR206	System Control
AIR216	Computer Applications
MATH206	Mathematics
COMM131-140	Communications Choices
GENED	General Education

SEMESTER 4	16 WEEKS
AIR207	Refrigeration Theory
AIR208	HVAC System Design
AIR209	System Control
ARDR226	Drafting
AIR210	Laboratory Applications
AIR211	Estimating
PHY208	Applied Physics
LIBS105-140	General Education Choices
GENED	General Education

SEMESTER 5	16 WEEKS
AIR314	Refrigeration Theory and Lab
AIR301	HVAC System Design
AIR315	Energy Management
AIR306	Computer Applications
MATH301	Mathematics
ENG304A	Technological Thesis
GENED	General Education

SEMESTER 6	16 WEEKS
AIR308	HVAC System Design
AIR317	Energy Management
AIR318	HVAC Fire Protection Systems
AIR313	Computer Applications
MATH312	Mathematics
AIR316	Contract Administration
GENED	General Education

For more information, call the co-ordinator at (416) 867-2000 ext. 4366 or Mechanical Systems Technology at (416) 867-2000 ext. 4360.

APPLIANCE SERVICING

GBC Code AR5450
Casa Loma Campus
36 Weeks
Apply to GBC

Starting: Continuous intake, every 18 weeks
Certification: Certificate
Summer classes, depending on start date

PREREQUISITES:
Grade 10 (with credits at or above general level) or equivalent, or mature student status (see page 7), and/or admission test.

ABOUT THE PROGRAM:
This program gives a thorough knowledge of the theory and practice required for the maintenance and repair of home appliances. The student should have a high mechanical aptitude. Graduates are prepared for occupations in servicing and as factory representatives, field representatives, appliance salespeople, appliance inspectors and production supervisors. Courses in laundry equipment, refrigeration and electrical appliances are presented in blocks of six weeks.

This program is unique in Metro Toronto.

CAREER PROSPECTS:
Servicing: The graduate will diagnose service problems and repair clothes washers, clothes dryers, dishwashers, ranges, microwave ovens, refrigerators, freezers and window air conditioners. This may be done in the customer's home or other locations.

Sales: The salesperson will market and give technical advice to potential customers in department or appliance stores.

COURSES	36 WEEKS
APL535	Electrical
MATH560	Mathematics
APL536	Conventional and Microwave Ranges
MATH561	Mathematics
APL537	Basic Refrigeration and Refrigerators
SBM534	Small Business Management
APL538	Freezers and Room Air Conditioners
SBM535	Small Business Management
APL539	Dishwashers and Clothes Dryers
SBM536	Small Business Management
APL540	Clothes Washers and Compactors
SBM537	Small Business Management
APL541	Gas Appliances

For more information, call the co-ordinator at (416) 867-2000 ext. 4367 or Mechanical Systems Technology at (416) 867-2000 ext. 4360.

PART-TIME AND EVENING COURSES
Call 867-2464 or 1-800-263-8995

ARCHITECTURAL TECHNICIAN — DRAFTING

GBC Code AR1040
Casa Loma Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). English and technical math are required.

ABOUT THE PROGRAM:
The architectural drafting technician is one of a team of technical personnel involved in the construction industry. Within the classroom environment, an office atmosphere is simulated by encouraging students to work in small groups and by using actual building projects from industry as case studies. Job site visits, guest speakers and other events are arranged to give students a complete understanding of actual residential and commercial projects.

Areas developed to give the student a broad base for a complete understanding of the building design and construction process include architectural drafting and design, production of working drawings, estimating and surveying systems information. Architectural presentation includes perspective, shades and shadows, pen, ink and felt pen rendering of interiors and exteriors.

Courses in building materials and methods provide a thorough knowledge of the correct use and applications of building materials for and within the building environment.

Computer-aided drafting (Auto CAD) is emphasized throughout.

CAREER PROSPECTS:
Graduates can play a significant role as design and detail draftspersons in architectural or consulting firms. Because of the broad subject core of the program, other employment opportunities are available in government and municipal offices as field supervisors, inspectors, sales consultants, detail draftspeople, expeditors; in fabrication firms, construction and developers' offices; and in other areas of the construction building industry.

ADVANCED STANDING:
Students who successfully complete semesters 1, 2, 3 and 4 may enter semester 5 of the Architectural Technology program.

SEMESTER 1	16 WEEKS
ARDR114	Computer-Aided Drafting I
ARDR167	Architectural Drafting and Design I
MATH166	Mathematics
SURV110	Surveying
COMM120	College English (or COMM107A)
CO107	Ontario Building Code, Architectural I
GENED	General Education

SEMESTER 2	16 WEEKS
ARCH110	Materials and Methods I
ARDR177	Architectural Drafting and Design II
MATH176	Mathematics II
ARDR128	Architectural Rendering and Presentation I
ARDR129	Computer-Aided Drafting II
LIBS105-130	General Education Choices

SEMESTER 3	16 WEEKS
ARCH120	Materials and Methods II
ARDR236	Architectural Drafting and Design III
MATH262	Mathematics III
ARDR203	Architectural Rendering and Presentation II
ARDR204	Computer-Aided Drafting III
SURV102A	Quantity Surveying I
COMM122-130	Communications Choices
GENED	General Education

SEMESTER 4	16 WEEKS
ARDR210	Mechanical Installations
ARDR246	Architectural Drafting and Design IV
MATH272	Mathematics IV
ELECO01	Language and Communications — Elective
ARDR301	Computer-Aided Design I
CO206	Ontario Building Code, Architectural II
PHY100A	Applied Physics
GENED	General Education
COMM131-140	Communications Choice

For more information, call the co-ordinator at (416) 867-2000 ext. 4399 or the Architectural Engineering office at (416) 867-2000 ext. 4391.

ARCHITECTURAL TECHNOLOGY

GBC Code AR1220
Casa Loma Campus
3 Years (6 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:

Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 technical mathematics is required. A cumulative grade point average of 2.3 and credit in all courses in semesters 1 to 4 must be achieved before entering into the third year. (See page 15.)

ABOUT THE PROGRAM:

The architectural technologist assumes responsibility for projects within an architectural office environment. To function in this capacity, the technologist is responsible for the activities and duties of a technician, but also cognizant of and responsible for the space requirements in design, as well as the economics of space and building science. A thorough knowledge of specifications and specification writing, building codes, by-laws, urban planning and construction law will emphasize the legal aspect and responsibility of an architectural firm or building construction office.

Computer design and drafting continue to be emphasized during semesters 5 and 6. The student will also design building projects using the basic language of design.

CAREER PROSPECTS:

Graduates of the three-year program, because of its wide subject base, can look towards employment in many avenues of the architectural/building construction industry.

Areas of employment possibilities: architectural and consulting engineers; building contractors and building developers; estimating and quantity take-off; building construction supervision for an architect, contractor or developer; operating and using a CADD system in the production of design and working drawings; sales and development of building products; developing technical sales literature; assisting in the writing of specifications; building inspector; and municipal and government building offices.

SEMESTER 1	16 WEEKS
ARDR114	Camputer Aided Drafting I
ARDR167	Architectural Drafting and Design I
MATH166	Mathematics
SURV110	Surveying
COMM120	College English (or COMM107A)
CO107	Ontario Building Code, Architectural I
GENED	General Educatian — Faundatian

SEMESTER 2	16 WEEKS
ARCH110	Materials and Methods I
ARDR177	Architectural Drafting and Design II
MATH176	Mathematics II
ARDR128	Architectural Rendering and Presentatian I
ARDR129	Camputer Aided Drafting II
LIB5105-130	General Educatian Chaices

SEMESTER 3	16 WEEKS
ARCH120	Materials and Methods II
ARDR236	Architectural Drafting and Design III
MATH262	Mathematics III
ELEC001	Lanuage and Cammunicatians III
ARDR203	Architectural Rendering and Presentatian II
ARDR204	Camputer Aided Drafting III
SURV102A	Quantity Surveying I
COMM122-130	Cammunicatians Chaices
GENED	General Educatian

SEMESTER 4	16 WEEKS
ARDR210	Mechanical Installatians I
ARDR246	Architectural Drafting and Design IV
MATH272	Mathematics IV
ARDR301	Camputer Aided Design I
CO206	Ontario Building Code, Architectural II
PHY100A	Applied Physics
COMM131-140	Cammunicatians
LIB5105-130	General Educatian Chaices

SEMESTER 5	16 WEEKS
ARCH300A	Building Science
MECH332A	Theary af Structures
URB300A	Urban Planning
SPEC300	Specificatians I
CO309	Canstructian Law I
EL369	Electrical Installatians
ARDR311	Camputer Aided Design II
ARCH301	Architectural Design I
GENED	General Educatian

SEMESTER 6	16 WEEKS
ARCH302A	Histary af Building
EC300A	Building Ecanamics
ARCH303A	Cammunity Planning
SPEC301	Specificatians II
CO319	Canstructian Law II
MECH331A	Building Engineering
ARDR312	Camputer Aided Design III
ARCH311	Architectural Design II
GENED	General Educatian

For more infarmatian, call the ca-ardinatar at (416) 867-2000 ext. 4399 ar the Architectural Engineering affice at (416) 867-2000 ext. 4391.

BUILDING RENOVATIONS

GBC Code AR1230
Casa Loma Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:

Ontario Secondary School credits (at or above general level) in Grade 12 mathematics and English, or equivalent, or mature student status (see page 7), and/or an admissions test. Grade 12 technical mathematics is recommended but not essential.

ABOUT THE PROGRAM:

This new program is aimed at meeting the growing demand for renovations in the building industry. An estimated 70 per cent of residential construction will include renovations and redevelopment by the year 2000, if the current trends continue. Home renovations play a critical role in the construction industry and in the ongoing maintenance and improvement of the housing of Canadians. In a slow economy when people are reluctant to buy or build new homes, renovations are often an attractive option. More than half of every dollar spent in the housing industry is spent on renovations. The Building Renovations program addresses this growth and the need for trained people. Students learn carpentry renovation skills in two large, fully equipped shops. Through practical and theoretical experience, they gain insight into the sub-trades; become familiar with the Ontario Building Code; obtain a thorough knowledge of building science; learn the fundamentals of renovation estimating and cost accounting; get exposure to computer applications; and develop techniques to effectively plan and market a small business.

This program is unique in Metro Toronto.

CAREER PROSPECTS:

Graduates develop the skills and confidence necessary to enter the renovation field, which is always in need of skilled workers, even in tight economic times. Opportunities exist as project managers and site supervisors, and can eventually lead students to set up and operate their own renovation contracting business. Students may also choose to apply their credits towards their general carpenter apprenticeship, upon approval of the Ministry of Education and Training.

SEMESTER 1	16 WEEKS
BR105	Tools and Equipment Methods
BR107	Materials and Applications
BR109	Construction Safety
BR105	Introductary Drafting
MATH183	Calculations
MATH185	Descriptive Trade Geometry
BR111	Business Literacy and Applications

SEMESTER 2	16 WEEKS
BR113	Residential Canstruction Principles (Practical)
BR115	Residential Canstruction Principles (Theory)
BR117	Renavatian Methods and Materials I (Practical)
BR119	Renavatian Methods and Materials I (Theary)
ARCH205	Architectural Plan Interpretatian I
EST111	Introductary Estimating
COMM142	Business Cammunicatians

SEMESTER 3	16 WEEKS
BR202	Cammercial Canstruction Principles (Practical)
BR204	Cammercial Canstruction Principles (Theary)
BR206	Renavatian Methods and Materials II (Practical)
BR208	Renavatian Methods and Materials II (Theary)
ARCH205	Architectural Plan Interpretatian II
EST207	Renavatian Praject Estimating
BR210	Renavatian Business Management

SEMESTER 4	16 WEEKS
BR212	Associated Trades (Practical)
BR214	Associated Trades (Theary)
BR216	Renavatian Methods and Materials III (Practical)
BR218	Renavatian Methods and Materials III (Theary)
BR220	Envirannental Impact for Renavatars
BR222	Renavatian Praject Management
BR224	Renavatian Business Marketing

For more information call the Construction Trades Office at (416) 867-2000 ext. 4388/4400.

CARPENTER — GENERAL

GBC Code AR5510
Casa Loma Campus
36 Weeks
Apply to OCAS

Starting: September
Certification: Certificate

PREREQUISITES:
Ontario secondary school credits in mathematics and English in Grades 9 and 10 at or above the general level, or equivalent, or mature student status (see page 7), and/or an admission test. Technical math at the Grade 10 level is recommended.

ABOUT THE PROGRAM:
George Brown has one of the most well-established carpentry apprenticeship training programs in the province. Students learn carpentry skills in two large, fully equipped modern shops. The program covers hand and power tools, general woodworking, acoustics and welding. Students may go to work in carpentry or a related woodworking industry after graduation, or they may choose to apply their credits towards their general carpenter's apprenticeship, granted by the Ministry of Education and Training. If the student wishes to continue into the apprenticeship program, credits within the apprenticeship regulations are given for the in-college training. To complete their apprenticeship, graduates must do the minimum number of hours required by the Ontario Department of Skills Development.

CAREER PROSPECTS:
The construction industry will continue to require tradespeople for on-site construction and shop fabrication. Graduates may be employed in residential construction, general contracting, renovations and the rehabilitation of existing buildings. Opportunities also exist in many other related woodworking areas.

COURSES	36 WEEKS
CAR500	History, Regulations, Health and Safety
CAR501	Materials and Supplies
CAR502	Plans, Specifications and Codes I
CAR503	Estimating Calculation and Layout I
CAR504	Tools and Equipment
CAR520	Residential Construction
WELD522	Metal Cutting and Welding
CAR535	Commercial Construction
WELD536	Metal Cutting and Welding-Arc
CAR519	Estimating Calculation and Layout II
CAR534	Estimating Calculation and Layout III
CAR518	Plans, Specifications and Codes II
CAR533	Plans, Specification and Codes III

For more information call (416) 867-2000 ext. 4400 between 8 a.m. and 4 p.m.

ASSISTANT RENOVATOR PROGRAM

GBC Code AR5740
Casa Loma Campus
36 Weeks
Apply to OCAS

Starting: September
Certification: Certificate

PREREQUISITES:
Minimum of Grade 10 or equivalent functional level testing in mathematics and English.

ABOUT THE PROGRAM:
Recent statistics compiled by the Canadian Home Builders Association indicate that more than one half of every dollar spent in the Canadian housing industry is invested in the renovation field. Current trends indicate that by the year 2000 renovation and redevelopment projects will command a 70 per cent share of the residential construction market.

The Assistant Renovator program will provide the learner with the confidence and experience necessary to successfully enter the growing field of renovation. The design of the program allows the student to gain full accreditation for the basic component of the General Carpenter Apprenticeship. As well, this program will fulfill industrial need for highly educated carpentry apprentices, who have a thorough knowledge of the diverse field of renovations.

CAREER PROSPECTS:
The specific areas of opportunity which this program introduces the students to include renovation carpenter, building maintenance, brick and stone mason, electrician and plumber.

COURSES	36 WEEKS
BR502	Tools and Equipment Methods
BR504	Materials and Applications
BR506	Construction Safety
CAR536	Plans, Specifications and Codes I
BR508	Calculations and Layout
BR510	Renovation Principles and Techniques (Practical)
BR512	Renovation Principles and Techniques (Theory)
CAR538	Plans, Specifications and Codes II
EL514	Electrical (Practical)
EL516	Electrical (Theory)
PLUM520	Plumbing (Practical)
PLUM522	Plumbing (Theory)
CAR540	Introductary Estimating
MAS535	Masonry (Practical)
MAS538	Masonry (Theory)

For more information call (416) 867-2000 ext. 4400 between 8 a.m. and 4 p.m.

CIVIL ENGINEERING TECHNICIAN

GBC Code AR1100
Casa Loma Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 technical mathematics and English credits are required.

BACKGROUND:
Credits in physics, drafting and surveying are recommended.

ABOUT THE PROGRAM:
The Civil Engineering program prepares students for a career in the design, planning and construction of civil engineering projects.

Instructors use the project approach, particularly with technical subjects, to reinforce theoretical and practical aspects of engineering. This method emphasizes the understanding of the interaction between the major components of a structure. The in-depth review of construction materials fosters a better understanding of the building as an entity.

Well-equipped laboratories are used for the testing and quality control of various construction materials and components.

CAREER PROSPECTS:
Graduates may find employment in: structural engineering; municipal, government and contracting offices, as a member of the engineering team covering design, site engineering, site surveying and supervision, quality control and estimating; or as a laboratory technician.

ADVANCED STANDING:
Students who successfully complete semesters 1 and 2 of this program may enter semester 3 of: Civil Engineering Technology or Construction Engineering Technician or Technology.

SEMESTER 1	16 WEEKS
BT118	Construction Materials I
BT119	Site Surveying I
BT114	Introduction to Commercial/Industrial Construction
BT127	Structurol Steel I
MATH166A	Mathematics
MECH100	Mechanics
COMM120	College English (or COMM107A)
GENED	General Education

SEMESTER 2	16 WEEKS
BT120	Construction Materials II
BT128	Site Surveying II
BT126	Introduction to Camputers
BT123	Introduction to Residential Construction
BT129	Reinforced Concrete I
MATH176	Mathematics
MECH120	Mechanics
LIBS105-130	General Educatian Chaices

SEMESTER 3	16 WEEKS
CIV230	Reinforced Concrete Design II
CIV231	Municipal Services I
CIV232	Highway Technology I
CIV233	Plane Surveying I
CAD231	Camputer Aided Drafting
PHY234	Applied Physics
MATH236	Mathematics
COMM131-140	Communications Chaices
GENED	General Education

SEMESTER 4	16 WEEKS
CIV241	Structural Steel Design II
CIV222	Highway Technology II
CIV243	Plane Surveying II
CIV221	Municipal Services II
CIV245	Quantity Surveying and Estimating
MATH248	Mathematics
PHY244	Applied Physics
LIBS105-130	General Education Chaices
COMM131-140	Communications

For mare information, call the co-ordinator at (416) 867-2000 ext. 4397 ar Architectural Engineering at (416) 867-2000 ext. 4391.

CIVIL ENGINEERING TECHNOLOGY

GBC Code AR1160
Casa Loma Campus
3 Years (6 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 technical mathematics and English credits are required.

A cumulative grade point average of 2.3 and credit in all courses from semester 1 to 4 must be achieved before entering semester 5. (See page 15.)

BACKGROUND:
Credits in physics, drafting and surveying are recommended.

ABOUT THE PROGRAM:
This program prepares students for a career in the design, planning and construction of civil engineering projects, as contributing members of the design team.

The curriculum is based upon a core of applied science and mathematics as well as engineering applicable to civil technology.

The broad base in civil engineering subjects is required to give students maximum opportunity for employment in a changing market and to encourage a more mature judgment in their work as engineering technologists.

The introduction of computers as a tool for designing is emphasized in semesters 5 and 6.

CAREER PROSPECTS:
The civil engineering technologist may find employment in municipal engineering, transportation engineering, structural engineering, or construction management working either in the field or in the office as designer, site supervisor, site surveyor, quality control inspector, lab technician or estimator.

NEED SOME CAREER ADVICE
see page 3

SEMESTER 1	16 WEEKS
BT118	Construction Materials I
BT119	Site Surveying I
BT114	Introduction to Commercial/Industrial Construction
BT127	Structurol Steel I
MATH166	Mathematics
MECH100	Mechanics
COMM120	College English (ar COMM107A)
GENED	General Education

SEMESTER 2	16 WEEKS
BT120	Construction Materials II
BT12B	Site Surveying II
BT126	Introduction to Computers
BT123	Introduction to Residentiol Construction
BT129	Reinforced Concrete I
MATH176	Mathematics
MECH120	Mechanics
LIBS105-130	General Educatian Chaices

SEMESTER 3	16 WEEKS
CIV230	Reinforced Concrete Design II
CIV231	Municipal Services I
CIV232	Highway Technology I
CIV233	Plane Surveying I
CAD231	Computer Aided Drafting
PHY234	Applied Physics
MATH236	Mathematics
COMM122-130	Communications Chaices
GENED	General Education

SEMESTER 4	16 WEEKS
CIV241	Structural Steel Design II
CIV222	Highway Technology II
CIV243	Plane Surveying II
CIV221	Municipal Services II
CIV245	Quantity Surveying and Estimating
MATH248	Mathematics
PHY244	Applied Physics
LIBS105-130	General Education Choices
COMM131-140	Communications

SEMESTER 5	16 WEEKS
CIV310	Reinforced Concrete Design III
CIV303A	Highway Technology III (GIS)
CIV314	Soil Mechanics and Foundations I
CIV312	Municipal Engineering Planning
CO312	Construction Management I
ENG304A	Technalogicol Thesis
CAD202A	Camputer-Aided Construction Practice I

SEMESTER 6	16 WEEKS
CIV321	Structural Steel Design
CIV324	Soil Mechanics and Faundotians I
CIV323	Transportation Planning (GIS)
CO322	Canstruction Management II
MECH320	Theory of Structures
CIV322	Sanitory Technology
ENG304A	Technologicol Thesis
CAD302	AutoCad II

For more informatian, call the co-ordinotor at (416) 867-2000 ext. 4397 ar Architectural Engineering at (416) 867-2000 ext. 4391.

COMPUTER NUMERICAL CONTROL PART PROGRAMMER

GBC Code EN5590
Casa Loma Campus
32 weeks (1 semester)
Apply to OCAS

Starting: September, January
Certification: Certificate
No summer classes

PREREQUISITES:
Ontario Secondary School credits in mathematics and English in Grades 10 and 11 at or above the general level, or mature student status (see page 7). Candidates should also have a minimum of two years of machine shop experience as a machinist or equivalent.

ABOUT THE PROGRAM:
As more and more companies move towards computerized manufacturing and production, they need people with skills suited to these new methods of operation. This high-tech program was developed in response to industry need for employees with the skills and knowledge required in a computer-oriented workplace. Students learn about many aspects of computers and their function in manufacturing. Classes are centered around a well-equipped computer-aided manufacturing (CAM) centre. Students will learn the skills necessary to work in the field of computer numerical control (CNC) and computer assisted part programming. Computer numerical control part programmer is an exciting new occupational field that is expected to grow as the role of technology in manufacturing expands.

CAREER PROSPECTS:
Graduates of this program can look forward to careers in computer numerical control programming and machine tool operation.

COURSES	32 WEEKS
NC515	Computer Assisted Manufacturing
NC516	Tool/Fixture Design
NC517	Machine Parts Process Planning/ Quality Assurance
MATH548	Mathematics
COMM522	Technical English/Communication

For further information, call the co-ordinator at (416) 867-2000 ext. 4383, or the Computer Science and Mechanical Engineering Office at (416) 867-2000 ext. 4525.

CONSTRUCTION ENGINEERING TECHNICIAN

GBC Code AR1030
Casa Loma Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 technical mathematics and English credits are required.

BACKGROUND:
Credits in physics, drafting and surveying are recommended.

ABOUT THE PROGRAM:
The Construction Technician program prepares students to enter the construction industry in various capacities leading to positions such as estimators, expeditors, field engineers and superintendents, building inspectors, building product sales and others.

Instructors use the project approach to learning to reinforce the theoretical and practical parts of the program. In this way, the student is made familiar with industry's methods of working. Well-equipped laboratories are available for the testing and quality control of various construction materials and components.

This program is unique in Metro Toronto.

CAREER PROSPECTS:
The construction industry is one of Canada's largest employers and offers a variety of jobs for the construction technician. Positions may be found in a general or subcontractor's office or in a firm specializing in other forms of construction management such as quantity surveying or in sales as related to the building industry.

ADVANCED STANDING:
Students who successfully complete semesters 1 and 2 may enter semester 3 of the Construction Engineering Technology program or the Civil Engineering Technician or Technology programs.

SEMESTER 1	16 WEEKS
BT118	Construction Materials I
BT119	Site Surveying II
BT114	Introduction to Commercial/Industrial Construction
BT127	Structural Steel I
MATH166A	Mathematics
MECH100	Mechanics
COMM120	College English (or COMM107A)
GENED	General Education

SEMESTER 2	16 WEEKS
BT120	Construction Materials II
BT128	Site Surveying II
BT126	Introduction to Computers
BT123	Introduction to Residential Construction
BT129	Reinforced Concrete I
MATH176	Mathematics
MECH120	Mechanics
LIBS105-130	General Education

SEMESTER 3	16 WEEKS
CO234A	Quantity Surveying I
CO233	Building Construction I
CO235A	Mechanical Installations
CAD231	Computer Aided Drafting
MATH236	Mathematics
PHY234	Physics
COMM122-130	Communications Choices
GENED	General Education

SEMESTER 4	16 WEEKS
CO240A	Quantity Surveying II
CO231	Building Construction II
CO243A	Electrical Installations
CO232	Contracts and Specifications
MATH248	Mathematics
PHY244	Applied Physics
SBM101	Small Business Management
GENED	General Education
COMM131-140	Communications

For more information, call the co-ordinator at (416) 867-2000 ext. 4397 or the Architectural Engineering office at (416) 867-2000 ext. 4391.

YOUR PROGRAM MAY OFFER A BURSARY OR SCHOLARSHIP.
Contact your Program Coordinator or the Financial Assistance Office to find out.

CONSTRUCTION ENGINEERING TECHNOLOGY

GBC Code AR1170
Casa Loma Campus
3 Years (6 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 technical mathematics and English credits are required.

A cumulative grade point average of 2.3 and credits in all courses from semester 1 to 4 must be achieved before entering semester 5. (See page 15.)

BACKGROUND:
Credits in physics, drafting and surveying are recommended.

ABOUT THE PROGRAM:
Instructors use the project approach to learning to reinforce the theoretical and practical parts of the program. In this way, the student is made familiar with industry's methods of working. Well-equipped laboratories are available for the testing and quality control of various construction materials and components.

The concentration of quality surveying courses plus the inclusion of technical and related courses will provide a base for successful career advancement.

The use of a spreadsheet and of a commercial estimating software package is emphasized in Quantity Surveying and Estimating in semesters 5 and 6.

This program is unique in Metro Toronto.

CAREER PROSPECTS:
The construction industry offers a variety of jobs for the graduate construction technologist. Positions may be found in a general or subcontractor's office or in a firm specializing in other forms of construction management (such as quantity surveying) or in sales of construction related materials. Several graduates of the program have become site superintendents and project managers.

SEMESTER 1	16 WEEKS
BT118	Construction Materials I
BT119	Site Surveying I
BT114	Introduction to Commercial/Industrial Construction
BT127	Structural Steel I
MATH166A	Mathematics
MECH100	Mechanics
COMM120	College English (or COMM107A)
GENED	General Education

SEMESTER 2	16 WEEKS
BT120	Construction Materials II
BT128	Site Surveying II
BT126	Introduction to Computers
BT123	Introduction to Residential Construction
BT129	Reinforced Concrete I
MATH176	Mathematics
MECH120	Mechanics
LIBS105-130	General Education Choices

SEMESTER 3	16 WEEKS
CO234A	Quantity Surveying I
CO233	Building Construction I
CO235A	Mechanical Installations
CAD231	Computer-Aided Drafting
MATH236	Mathematics
PHY234	Physics
COMM122-130	Communications Choices
GENED	General Education

SEMESTER 4	16 WEEKS
CO240A	Quantity Surveying II
CO231	Building Construction II
CO243A	Electrical Installations
CO232	Contracts and Specifications
MATH248	Mathematics
PHY244	Applied Physics
COMM131-140	Communications
LIBS105-130	General Education Choices
SBM101	Small Business Management

SEMESTER 5	16 WEEKS
CO311	Quantity Surveying and Estimating I
CO310A	Construction Methods and Equipment I
CO312	Construction Management I
CO309	Construction Law I
CO358	Ontario Building Code, Parts 3 and 9
MATH307A	Applied Statistics
ENG304A	Technological Thesis

SEMESTER 6	16 WEEKS
CO321	Quantity Surveying and Estimating II
CO320A	Construction Methods and Equipment II
CO322	Construction Management II
CO319	Construction Law II
CO306	Building Economics
CAD302	Computer-Aided Construction Practice
ENV360	Environmental Sciences
ENG304A	Technological Thesis

For more information, call the co-ordinator at (416) 867-2000 ext. 4394 or Architectural Engineering Technology at (416) 867-2000 ext. 4391.

ELECTRICAL ENGINEERING TECHNICIAN — POWER & INDUSTRIAL ELECTRONIC CONTROL

GBC Code EL1020
Casa Loma Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 technical mathematics.

BACKGROUND:
Credits in physics, electricity and an electrical background are helpful but not essential.

ABOUT THE PROGRAM:
This program is highly respected in industry. Subjects covered include electrical fundamentals, D.C. and A.C. machines, industrial electronic controls, electrical drafting and related academic subjects. The student is trained in modern laboratories equipped with D.C. and A.C. generators, motors, computers, microprocessors, programmable controllers and computer-aided drafting equipment. The lectures, laboratory and computer work are aimed at enabling students to work on their own with the guidance of instructors.

Upon completion of the program, graduates should be able to effectively and independently function as technicians in the area of specialty required of them by the employer.

CAREER PROSPECTS:
Graduates find employment as: electrical maintenance technicians in industries using machinery controlled by complex electronic equipment; test technicians in manufacturing plants; service technicians for electrical manufacturers; sales representatives; and design technicians for manufacturers.

ADVANCED STANDING:
Students who complete this program are eligible to continue for a third year in the Electrical Engineering Technology — Power and Industrial Electronic Control program.

SEMESTER 1	16 WEEKS
EL111A	Electrical Fundamentals
EL251	Computer Programming
ELDR112A	Electrical Drafting I
MATH117A	Mathematics
COMM120	College English (or COMM107A)
GENED	General Education

SEMESTER 2	16 WEEKS
EL121A	Direct Current Machines (Theory)
EL122A	Electrical Circuits — AC
EL145	Industrial Electronics II (Theory and Lab)
MATH127A	Mathematics
COMM122-130	Communications Choices
GENED	General Education

SEMESTER 3	16 WEEKS
EL232A	Alternating Current Machines
EL236A	Industrial Electronics III
EL256	Computer Operating Systems
MATH227A	Mathematics
COMM131-140	Communications Choices
GENED	General Education

SEMESTER 4	16 WEEKS
EL234A	Electrical Distribution Systems
EL224	Electric Machines Control
EL254A	Industrial Electronics IV
EL245	Wiring Methods and Electrical Code
ELDR231	Electrical Drafting III
MATH237A	Mathematics
EL258	Technical Report
LIBS105-140	General Education Choices

For more information, call Gerd Strzelba at (416) 867-2000 ext. 4373 or (416) 867-2000 ext. 4370 between 8 a.m. and 4 p.m.

ELECTRICAL ENGINEERING TECHNOLOGY — POWER & INDUSTRIAL ELECTRONIC CONTROL

GBC Code EL1070
Casa Loma Campus
3 Years (6 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 technical mathematics.

BACKGROUND:
An electrical background is helpful but not essential.

ABOUT THE PROGRAM:
The Electrical Engineering Technology program consists of a variety of subjects leading towards the independent design of equipment and systems. The student is trained in modern laboratories equipped with D.C. and A.C. generators, motors, computers, microprocessors and programmable logic controllers and computer-aided drafting equipment.

The lectures, labs and design projects are aimed at enabling students to work on their own with the guidance of instructors.

Upon completion of the program, graduates should be competent to perform their duties as electrical technologists and be aware of the changing nature of business, industry, science, technology, society and education. Graduates will recognize the need to continually update and upgrade their technical skills and knowledge for a positive contribution to Canadian industry.

CAREER PROSPECTS:
Graduates find employment in: processing industries as designers or draftspersons; maintenance positions to keep production within acceptable limits; consulting engineering firms as electrical system designers; electrical contractors as estimators or in supervisory positions; manufacturing as quality control inspectors; marketing, designing and servicing equipment or products in electrical utilities; designers and/or supervisors of substations, electrical networks or transmission lines; inspectors in government departments; and as educators.

SEMESTER 1	16 WEEKS
EL111A	Electrical Fundamentals
EL251	Computer Programming
ELDR112A	Electrical Drafting I
MATH117A	Mathematics
COMM120	College English (or COMM107A)
GENED	General Education

SEMESTER 2	16 WEEKS
EL121A	Direct Current Machines (Theory)
EL122A	Electrical Circuits — AC
EL145	Industrial Electronics II (Theory and Lab)
MATH127A	Mathematics
COMM121-130	Communications Choices
GENED	General Education

SEMESTER 3	16 WEEKS
EL232A	Alternating Current Machines
EL236A	Industrial Electronics III
EL256	Computer Operating Systems
MATH227A	Mathematics
COMM131-140	Communications Choices
GENED	General Education

SEMESTER 4	16 WEEKS
EL234A	Electrical Distribution Systems
EL224	Electric Machines Control
EL254A	Industrial Electronics IV
EL245	Wiring Methods and Electrical Code
ELDR231	Electrical Drafting III
MATH237A	Mathematics
EL258	Technical Report
LIBS105-130	General Education Choices

SEMESTER 5	16 WEEKS
EL343	Protection of Electrical Equipment
EL353	Electrical Lab Systems
EL344	Industrial Electronic V
EL345	Industrial Electronic Lab V
EL365	Electrical Estimating
ELDR235	Electrical Drafting V
MATH321	Mathematics

SEMESTER 6	16 WEEKS
EL364	Electrical Machine Design
EL370	Programmable Logic Controllers (Theory and Lab)
EL366	Research Assignment
EL367	Industrial Electronic VI
EL368	Industrial Electronic Lab VI
ELDR355	Electrical Drafting VI
MATH321	Mathematics
MECH203	Mechanisms
PHY200	Modern Physics

For more information, call Gerd Strzelba at (416) 867-2000 ext. 4373 or (416) 867-2000 ext. 4370 between 8 a.m. and 4 p.m.

ELECTRONICS ENGINEERING TECHNICIAN

GBC Code EL1030
Casa Loma Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September, October, February
Certification: Diploma
Summer classes with February intake

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 technical or advanced math plus one senior science credit.

BACKGROUND:
Credits in physics, drafting, electricity/electronics, mechanics, chemistry and computer programming are useful. The technician usually works with a customer; therefore, an ability to communicate effectively with others is essential.

ABOUT THE PROGRAM:
This program gives students the opportunity to work in the maintenance, installation, production, design or research phases of the electronics industry. Students participate in hands-on labs and take subjects in five-week blocks. In order to better qualify the graduate to be immediately productive in industry, the program is designed so that second-year students specialize in either communications or computers.

CAREER PROSPECTS:
Graduates of this program are employed in research and engineering departments of government and industry, in utility companies, in radio and television broadcasting, in closed-circuit television studios, in the oil industry and in the installation of computer and communication systems.

ADVANCED STANDING:
Students who successfully complete this program may be eligible for advanced standing in the Electronics Engineering Technology program.

SEMESTER 1	15 WEEKS
ELTC160	Passive Circuits I
ELTC162	Passive Circuits II
ELTC164	Passive Circuits III
ELTC163	Electronic Laboratory
MATH141	Mathematics
COMM120	College English

SEMESTER 2	15 WEEKS
ELTC165	Passive Circuits IV
ELTC166	Passive Circuits V
ELTC161	Passive Circuits VI
MATH142	Mathematics
COMM122-130	Communications Choices

SEMESTER 3	15 WEEKS
ELTC242	Microprocessors and Systems Applications
ELTC144	AM/FM Modulation Principles and Receivers
ELTC208	Waveshaping Circuits
ELTC244	Electronic Laboratory
MATH241	Mathematics
ELTC203C	Computer Aided Design
COMM131-140	Communications Choices

SEMESTER 4	22 WEEKS
ELTC213	Communication Principles
ELTC105	TV Principles and Circuits
ELTC243	Analog/Digital Interfacing
ELTC245	Electronic Laboratory
ELTC299	Technical Report
ELTC203D	Computer Aided Design

Choose 1 of the following 2 electives:

ELTC214	Communication Systems
ELTC216	Computer Systems

For more information, call (416) 867-2000 ext. 4755 between 8 a.m. and 4 p.m.

ELECTRONICS ENGINEERING TECHNOLOGY

GBC Code EL1050
Casa Loma Campus
2 Years (continuous for 90 weeks)
Apply to OCAS

Starting: September
Certification: Diploma
Summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 technical or advanced math plus one senior science credit.

BACKGROUND:
Credits in physics, chemistry, drafting, electricity/electronics, mechanics and computer programming are useful.

ABOUT THE PROGRAM:
This program is compressed into two calendar years and runs continuous for 90 weeks. This program was developed to meet the industry need for engineering technologists with a practical and theoretical knowledge who can work effectively in the many areas of electronics. A practical thesis design project must be completed. Electronics subjects are offered in five-week blocks.

Technologists usually work on their own initiative, but under the general supervision of an engineer, scientist or senior technologist. This program provides students with a knowledge of advanced electronics based on quantitative analysis of electronic circuits and systems. Because of the depth of knowledge required by technologists, the college will review the student's progress at the end of the first semester to determine suitability for further technologist training. Those not qualifying may transfer to the Electronics Engineering Technician program.

CAREER PROSPECTS:
Graduates may be employed in many fields: design and construction of equipment; maintenance, repair and installation of systems computers and communication systems; quality control management; marketing and research.

ADVANCED STANDING:
Students who successfully complete this program may be eligible for advanced standing in the engineering program at Lakehead University.

SEMESTER 1	15 WEEKS
ELTC160	Passive Circuits I
ELTC161	Passive Circuits II
ELTC162	Passive Circuits III
MATH151	Mathematics
ELTC203A	Computer-Aided Design
COMM120	College English (or COMM107A)

SEMESTER 2	15 WEEKS
ELTC150	Passive Circuits IV
ELTC231	Passive Circuits V
ELTC148	Passive Circuits VI
ELTC151	Electronic Laboratory
MATH152	Mathematics
ELTC203B	Computer-Aided Design
COMM122-130	Communications Choices

SEMESTER 3	(SUMMER) 15 WEEKS
ELTC149	Advanced Transistors
ELTC230	Waveshaping and Control Devices
ELTC241	Computer Technology I
ELTC233	Electronic Laboratory
MATH251	Mathematics
COMM131-140	Communications Choices

SEMESTER 4	15 WEEKS
ELTC237	Operational Amplifier Design
ELTC236	Communications Technology Part I
ELTC232	AM/FM Technology
ELTC239	Electronic Laboratory
ELTC203E	Computer-Aided Design
PHY201T	Physics
ENG304A	Technological Thesis

SEMESTER 5	15 WEEKS
ELTC301	Communications Technology Part II
ELTC322	Computer Technology II
ELTC320	System Design I
ELTC312	Electronic Laboratory
MATH351	Mathematics
ELTC203F	Computer-Aided Design
ENG304	Technological Thesis

SEMESTER 6	(SUMMER) 15 WEEKS
ELTC321	System Design II
ELTC303	Automatic Controls Systems
ELTC399	Electronic Technology Report
ELTC316	Laboratory
PHY202T	Modern Physics

For more information, call (416) 867-2000 ext. 4755 between 8 a.m. and 4 p.m.

GAS FITTER

GBC Code AR5430
Casa Loma Campus
26 Weeks
Apply to OCAS

Starting: September
Certification: Certificate
No summer classes

PREREQUISITE:
Applicants are required to write an admissions test.

ABOUT THE PROGRAM:
This program is offered in a large, fully equipped shop that allows students plenty of hands-on practice. The complexity and variety of natural gas equipment in operation today has created a need for well-trained gas burner servicers who are knowledgeable in domestic gas ranges and dryers, and the large commercial package gas-fired boilers.

The gas burner servicing program has been developed by the college in response to a need in the gas industry. The program gives instruction in the installation and servicing of domestic gas burners, gas appliances, and commercial and industrial gas burners. The program has been designed to create a blend between theory and practice by giving equal weight to classroom instruction and practice in the gas shop.

This program is unique in Metro Toronto.

CAREER PROSPECTS:
In order to work in this field, students must successfully complete a provincial exam of the Fuels Safety Branch of the Ontario Department of Skills Development.

The exam, written at the end of the program, qualifies students immediately for their Gas Fitter II license and only a one year probation for the Gas Fitter I license. Graduates of the Gas Fitter program will find wide and diverse employment opportunities in the gas servicing industry. Many are employed by gas companies and their prime contractors, as well as independent heating companies.

Graduates who seek self-employment may elect to open their own businesses. Many graduates from the Gas Fitter program are working today as sub-contractors offering their services to major heating companies in the industry.

COURSES	26 WEEKS
HT569	Electricity
HT570	Residential Gas Burners
MATH533	Mathematics
HT571	Residential Heating Equipment
HT514	Commercial and Industrial Gas Burners
ENG542	Industrial Communications

For more information, call the co-ordinator at (416) 867-2000 ext. 4368 or Mechanical Systems Technology at (416) 867-2000 ext. 4360.

PART-TIME AND EVENING COURSES
Call 867-2464 or 1-800-263-8995

HEATING TECHNICIAN

GBC Code AR5420
Casa Loma Campus
52 Weeks (continuous)
Apply to OCAS

Starting: September, January
Certification: Certificate
Summer classes

PREREQUISITE:
Applicants are required to write an admissions test.

ABOUT THE PROGRAM:
This program offers hands-on training in a very well-equipped shop. In the heating field, there is a considerable demand for technical personnel who are knowledgeable in oil, gas and electric heating and cooling systems.

Rising fuel prices and the need to conserve energy have created a growing concern in the consuming public as to the efficient operation of their heating systems. This concern has created a demand for skilled technicians knowledgeable in the servicing, installation and design of the various types of residential and commercial heating and cooling systems.

The Heating Technician program covers the application of all of the basic fuels (i.e., oil, gas and propane) as well as electric heating and cooling systems. Heating system layout and design are covered in such areas as load calculations, system design and system balancing. New advances in residential and commercial heating technology such as heat pumps, high-efficiency furnaces and programmable environmental control have also been integrated into the program.

Both the theory and practice of the above have equal weight, giving the student a well-rounded knowledge in the design, servicing and installation of heating systems.

CAREER PROSPECTS:
Since the heating technician program covers many facets of heating and heating systems, graduates will find diverse employment opportunities. Many are employed by gas companies oil companies, and their prime contractors and dealers in sales, servicing and installation of heating systems. A large number of graduates find employment with independent heating and cooling companies in design and layout, as well as servicing and installation of heating and cooling systems. Large private and public corporations such as municipalities, school boards and property management companies also employ graduates in the maintenance of their heating systems. Graduates must write a provincial exam.

COURSES	52 WEEKS
HT502	Basic Electricity
HT501	Oil Burners
HT510	Heating (Residential Heat Load)
MATH538	Mathematics
HT573	Heating (Commercial Oil and Gas)
HT574	Heating (Commercial Systems)
MATH539	Mathematics
HT521	Central Air Conditianing and Heat Pumps
HT534	Propane
HT572	Residential HVAC System Design
HT540	Gas Burners (Fitter II)
PHY531	Physics
ENG587	Language and Communicotion
ENG588	Languoge and Communicotion

For more infarmotion, coll the co-ordinotor ot (416) 867-2000 ext. 4368 or Mechanical Systems Technology ot (416) 867-2000 ext. 4360.

NEED SOME CAREER ADVICE
see page 3

INSTRUMENTATION ENGINEERING TECHNICIAN — INDUSTRIAL

GBC Code EN1010
Casa Loma Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September, October, February
Certification: Diploma
Summer classes with February intake

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 technical or advanced math plus one senior science credit.

BACKGROUND:
A technician usually works with a customer; therefore, an ability to communicate effectively with others is essential.

ABOUT THE PROGRAM:
Students get hands-on practical experience as well as theory. The instrumentation technician works in all phases of industry using automatic controls. Each instruction period is followed by one or more laboratory periods to reinforce theory. The student is given a sound grounding in everything from research and development to sales and service for instrument manufacturers. Subjects are taken in five-week blocks. The first year is common to the Electronics Engineering Technician program so students can easily transfer during the first year.

CAREER PROSPECTS:
Job opportunities range from positions in research and development to sales and service for instrument manufacturers and distributors.

ADVANCED STANDING:
Credits earned in this program may qualify students for exemptions in the Instrumentation Engineering Technology — Industrial program.

SEMESTER 1	15 WEEKS
ELTC160	Introduction to Electronics
ELTC162	Electrical Fundamentals Advanced
ELTC164	Impedance, Resonance and Filters
ELTC163	Electronic Laboratory
MATH141	Mathematics
ELTC203A	Computer-Aided Design
COMM120	College English (or COMM107A)

SEMESTER 2	15 WEEKS
ELTC165	Introduction to Amplifier Systems
ELTC166	Applied Amplifier Systems
ELTC161	Logic Circuits
ELTC167	Electronic Laboratory
MATH142	Mathematics
ELTC203B	Computer-Aided Design
COMM122-130	Communications Choices

SEMESTER 3	15 WEEKS
ELTC209A	Laboratory — Electronics
ELTC242	Microprocessors and Systems Applicotions
INST104	Measuring Principles I
INST105	Measuring Principles II
INST209A	Laboratory — Instrumentotion
MATH241	Mathematics
CHEM100	Applied Chemistry
ELTC203C	Computer-Aided Design
COMM131	Report Writing

SEMESTER 4	22 WEEKS
INST201	Final Control Elements
INST202	Analytical and Environmental Instrumentation
INST210	Automatic Control Principles I
INST310	Automatic Control Principles II
INST209B	Laboratory — Instrumentation
CHEM200	Industrial Chemistry and Equipment
INST299	Technical Report
ELTC203D	Computer-Aided Design

For more information, call (416) 867-2000 ext. 4755 between 8 a.m. and 4 p.m.

INSTRUMENTATION ENGINEERING TECHNOLOGY — INDUSTRIAL

GBC Code EN1140
Casa Loma Campus
90 Weeks (continuous)
Apply to OCAS

Starting: September
Certification: Diploma
Summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 technical or advanced math plus one senior science credit.

BACKGROUND:
Credits in physics, chemistry, drafting, electricity/electronics, mechanics and computer programing are useful. Grade 12 chemistry is highly recommended.

ABOUT THE PROGRAM:
This program is compressed from three years into two calendar years and includes two summer semesters. The instrumentation technologist primarily designs or modifies systems. Job opportunities range from positions in research and development to sales and service for instrument manufacturers.

The student is given a firm grounding in electronic instrumentation, pneumatic instruction, computer technology and related academic subjects. Each instruction period is followed by one or more laboratory periods to reinforce theory. Subjects are taken in five-week blocks.

CAREER PROSPECTS:
The technologist's role in industry is primarily to design and modify systems. The technologist may specialize in one aspect of instrumentation engineering, such as computer control, analysis instrumentation or electronic instrumentation.

ADVANCED STANDING:
Students who successfully complete this program may be eligible for advanced standing in the engineering program at Lakehead University.

SEMESTER 1	15 WEEKS
ELTC160	Introduction to Electranics
ELTC162	Electricol Fundamentols Advanced
ELTC163	Electranic Laboratory
MATH151	Mathematics
ELTC164	Impedonce, Resononce and Filters
ELTC203A	Computer-Aided Design
COMM120	College English (or COMM107A)

SEMESTER 2	15 WEEKS
ELTC150	Logic Systems
ELTC231	Semicanductor Devices
ELTC148	Semicanductor Principles ond Circuits
ELTC151	Electranic Laborotory
MATH152	Mathematics
ELTC203B	Computer-Aided Design
COMM122-130	Communicatians Choices

SEMESTER 3	(SUMMER) 15 WEEKS
ELTC149	Advanced Transistors
ELTC233	Electronic Laboratory
ELTC230	Waveshoping and Cantral Devices
ELTC241	Camputer Technology I
MATH251	Mathematics
COMM131-140	Communicotions Choices

SEMESTER 4	15 WEEKS
ELTC237	Operationol Amplifier Design
INST104	Measuring Principles I
INST105	Meosuring Principles II
INST221	Laboratory — Instrumentotion
PHY201	Physics
CHEM100	Applied Chemistry
INST210	Automatic Control Principles I
ELTC203E	Computer-Aided Design
ENG304	Technological Thesis

SEMESTER 5	15 WEEKS
INST310	Automotic Control Principles II
INST201	Finol Control Elements
INST309A	Laboratory — Instrumentotion
MATH351	Mathematics
CHEM200	Industriol Chemistry ond Equipment
ELTC241	Camputer Technology I
ELTC221B	Laboratory — Electronics
ENG304	Technological Thesis

SEMESTER 6	(SUMMER) 15 WEEKS
INST202	Analyticol and Environmental Instrumentation
INST302	Systems Design and Construction
ELTC303	Automatic Cantrols Systems
INST309B	Laboratory — Instrumentation
ELTC309B	Laboratory — Electronics
PHY202	Modern Physics
INST399	Technology Report

For more information, call (416) 867-2000 ext. 4755 between 8 a.m. and 4 p.m.

MECHANICAL ENGINEERING

Mechanical Engineering offers six career options for students.

A common first year provides foundation for all Technician options, including: Design, Drafting Design (CAD/CAM), Mechatronics, Tool & Die Maker, Quality Assurance*.

Upon completion of any of the Technician programs, students may also choose to move into a third year Technology option in Design.

In additon, students may wish to pursue an apprenticeship.

**Subject to approval by the Ministry of Educotion and Training.*

MECHANICAL ENGINEERING TECHNICIAN — DESIGN

GBC Code EN1170
Casa Loma Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
Summer classes with January intake

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Credits in technical mathematics and English.

BACKGROUND:
A good background in science is recommended. Drafting and machine shop courses are strongly recommended.

ABOUT THE PROGRAM:
Good shop facilities and a well-established program give students an opportunity to develop skills in this hi-tech area. Modernization and the streamlining of design, drafting and production methods have led to increased demand for people with up-to-date skills. New skills are required at all levels in order for employees to keep pace with change in a computer-oriented design/drafting environment.

This program emphasizes computer aided tool design and drafting and is designed to provide industry with skilled tool design personnel. Centered around a well-equipped computer-aided engineering area, the program exposes students to all aspects of tool design in engineering. Graduates of this program may be integrated into the engineering field with a minimum amount of on-the-job training.

CAREER PROSPECTS:
The program is a high-technology level of training that emphasizes the skills required to become proficient in the fields of computer-aided design and drafting. Graduates can look forward to a career in the leading edge of engineering design, entering such areas as tool design, product design, machine design and consulting engineering design offices and general drawing offices.

ADVANCED STANDING:
Students who successfully complete this program may enter the Mechanical Engineering Technologist-Design program.

SEMESTER 1	16 WEEKS
ENDR106	Engineering Design Theory I
MACH105	Machining Fundamentals I
MACH106	Manufacturing Processes
ENDR105	Computers in Engineering Applications I
MATH166	Applied Mathematics I
COMM120	College English (or COMM107A)

SEMESTER 2	16 WEEKS
MECH119	Engineering Design Theory II
ENDR123	Machining Fundamentals II
ENDR122	Computers in Engineering Applications II
SC101	Engineering Science I
MATH176	Applied Mathematics II
COMM122-130	Communicotions Choices

SEMESTER 3	16 WEEKS
ENDR204	Jig and Fixture Design I
CAD203	Computer-Aided Design I
SC201	Engineering Sciences II
MATH222	Applied Mathematics III
COMM131-140	Communicotions Choices

SEMESTER 4	16 WEEKS
ENDR223	Die Design I
CAD213	Computer-Aided Design II
SC223	Engineering Sciences III
MATH230	Applied Mathematics IV
LIBS105-130	General Educotion Choices

For more information, call Paul Stevens at (416) 867-2000 ext. 4376 or Larella Lee at (416) 867-2000 ext. 4525 between 8 a.m. and 4 p.m.

MECHANICAL ENGINEERING TECHNICIAN — DRAFTING DESIGN (CAD/CAM)

GBC Code EN2010
Casa Loma Campus
62 Weeks (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
Summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Credits in technical mathematics and English.

BACKGROUND:
A good background in mathematics and science will assist students in successfully completing the program. Courses in drafting and machine shop are recommended.

ABOUT THE PROGRAM:
Computer-aided design (CAD) and computer-aided manufacturing (CAM) are the kinds of skills that will continue to be needed as the hi-tech sector grows. The modernization and streamlining of engineering and production methods have meant that employees need new or upgraded skills to thrive in a computer-oriented manufacturing environment.

George Brown's good lab facilities and well-established program with an emphasis on CAD/CAM will equip the student with new skills and provide industry with an employment pool. Graduates of this program are integrated into the engineering field with a minimum amount of on-the-job training.

CAREER PROSPECTS:
The program is a high-technology level of training that emphasizes the skills required to become proficient in the fields of computer-aided design and manufacturing. Graduates of this program can look forward to a career in the leading edge of manufacturing, entering such fields as numerical control programming, process planning, tool design, machine design and CAD/CAM application support.

SEMESTER 1	16 WEEKS
ENDR106	Engineering Design Theory I
MACH105	Machining Fundamentals I
MACH106	Manufacturing Processes
ENDR105	Computers in Engineering Applications I
MATH166	Applied Mathematics I
COMM120	College English (or COMM107A)

SEMESTER 2	16 WEEKS
MECH119	Engineering Design Theory II
ENDR123	Machining Fundamentals II
ENDR122	Computers in Engineering Applications II
SC101	Engineering Science I
MATH176	Applied Mathematics II
COMM122-130	Communications Choices

SEMESTER 3	(SUMMER)16 WEEKS
MACH206	Computer-Aided Manufacturing
MACH205	Computer-Aided Design/Drafting
PRGM240	Computer Programming/Systems
ENDR243	Tool Design Concepts
MATH233	Applied Mathematics III
COMM132-140	Communications Choices

SEMESTER 4	16 WEEKS
MACH205	Computer-Aided Design/Drafting
MACH206	Computer-Aided Manufacturing
MATH234	Applied Mathematics IV
ENDR243	Tool Design Concepts
PRGM240	Computer Programming/Systems
LIBS105-130	General Education Choices

For more information, coll Paul Stevens at (416) 867-2000 ext. 4376 or Larella Lee ot (416) 867-2000 ext. 4525 between 8 o.m. ond 4 p.m.

MECHANICAL ENGINEERING TECHNICIAN — MECHATRONICS

GBC Code EN1220
Casa Loma Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September 1993
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 English and technical math are also required. Applicants must take an admissions test.

ABOUT THE PROGRAM:
This program is a new addition to the George Brown College Centre for Advanced Design and Manufacturing. Mechatronics is the industrial skill required to design, fabricate, assemble, install, commission, troubleshoot and maintain automated equipment and related control and communications systems.

With modernization in technology, industrial automation is becoming more and more important in enhancing productivity and product quality. To meet Ontario's needs in the 21st century, we are responding to the increasing demand for highly trained personnel who will be capable of operating new, sophisticated manufacturing and testing equipment.

Mechatronics technicians are able to support designs and installations as members of a multi-skilled production team and are completely familiar with these technologies: mechanical engineering, electrical/electronics engineering, hydraulics and pneumatics, and programmable logic controllers.

This program is unique in Canada.

CAREER PROSPECTS:
As a mechatronics technician, opportunities are available at the production level or as an associate of a design team for the development of automated devices and systems in industry.

SEMESTER 1	16 WEEKS
COMM120	College English
MATH166	Applied Mathematics I
MACH105	Machining Fundamentals I
ENDR105	Computers in Engineering Applications I
MACH106	Manufacturing Processes
ENDR106	Engineering Design/Theory I

SEMESTER 2	16 WEEKS
COMM122-130	Communications Choices
MATH176	Applied Mathematics II
MECH119	Engineering Design/Theory II
ENDR122	Computers in Engineering Applications II
ENDR123	Machining Fundamentals II
SC101	Engineering Science I

SEMESTER 3	16 WEEKS
COMM131-140	Communications Choices
MATH223	Industriol Mathematics and Statistics I
MECH217	Control Technology I
MECH212	Dynamics of Machines
MECH210	Moteriol Properties
MECH208	Mechotronics I

SEMESTER 4	16 WEEKS
LIB105,130	General Education Choices
MATH226	Industriol Mathematics and Statistics II
MECH228	Control Technology II
QC212	Quality Assurance
MECH226	Mechatranics II

For more information, call the co-ordinator at (416) 867-2000 ext. 4379 or the Computer Science and Engineering Office at (416) 867-2000 ext. 4376.

YOUR PROGRAM MAY OFFER A BURSARY OR SCHOLARSHIP.
Contact your Program Coordinator or the Financial Assistance Office to find out.

MECHANICAL ENGINEERING TECHNICIAN — QUALITY ASSURANCE

GBC Code EN
Casa Loma Campus
2 Years (4 semesters)
OCAS Apply to OCAS

Starting: September 1993, subject to Ministry approval
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Mature students will be interviewed and tested on basic academic ability in English and mathematics.

BACKGROUND:
A good background in mathematics and English will assist the student in comprehending the subjects of this program.

ABOUT THE PROGRAM:
Companies around the world are becoming more and more interested in quality assurance. This program was designed in response to industry need for people with knowledge and skills in this area — one of the newest and most challenging areas of industry today. In order to remain competitive, profitable, and efficient, companies are recognizing the need to have quality assurance systems in place.

Quality assurance is even more of a priority for companies following the adoption of a new set of international standards for products and services. ISO9000 is a series of generic product and service standards published by the International Standards Organization (ISO) — and the new standards are having a huge impact on businesses everywhere. Many companies are restructuring their manufacturing and service systems and techniques to meet the requirements of the new standards. In order to improve competitiveness, profitability, quality product output, and customer service, companies are following the ISO9000 guidelines that have been recognized as a benchmark of quality.

This program emphasizes the development, maintenance, controlling and auditing of quality assurance systems. Students develop a comprehensive knowledge of statistics, quality assurance management techniques, concepts of reliability, quality costing, manufacturing cost estimating, computer-aided drafting (CAD), and computer-aided design (CAM) and management communication skills. Graduates get the education and training needed to write the Certified Quality Technician (CQT) examination of the American Society for Quality Control (ASQC). Ambitious graduates with some tutorials and the required quality function experience can write the CQE or CRE examinations given by the society.

CAREER PROSPECTS:
Graduates of this program can expect entry level employment as a quality assurance technician/technologist. With work experience, they can aspire to the level of quality assurance manager.

SEMESTER 1	16 WEEKS
ENDR106	Engineering Design Theory I
MACH105	Machining Fundamentals I
MACH106	Manufacturing Processes
ENDR105	Computers in Engineering Applications I
MATH166	Applied Mathematics I
COMM120	College English

SEMESTER 2	16 WEEKS
MECH119	Engineering Design Theory II
ENDR123	Machining Fundamentals II
SC101	Engineering Science I
ENDR122	Computers in Engineering Applications II
MATH176	Applied Mathematics II
COMM122-130	Communications Choices

SEMESTER 3	16 WEEKS
	Campu Measurement System DP-3DX
	Statistical Quality Control I
	Inspection and Testing Systems (ISO 9002 QS)
MATH222	Applied Mathematics III
	Quality Management Concepts
	Quality Systems ISO9000 Series Applications
COMM131-140	Communications Choices

SEMESTER 4	16 WEEKS
	Management of Quality Assurance
	Manufacturing Cost and Estimating
	Reliability and Maintainability
	Statistical Quality Control II
MATH230	Applied Mathematics IV
	Career Education
LIBS105-130	General Education Choices

For further information, call Robert Young at (416) 867-2000 ext. 4385 between 8 a.m. and 4 p.m.

MECHANICAL ENGINEERING TECHNICIAN — TOOL AND DIE MAKER

GBC Code EN1040
Casa Loma Campus
2 Years (4 semesters)
OCAS Apply to OCAS

Starting: September, January
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7).

BACKGROUND:
A good background in mathematics is recommended. Drafting and machine shop are also recommended.

ABOUT THE PROGRAM:
Rapid changes in technology have caused a revolution in tool-and-die-making methods. Ceramic tooling has completely changed traditional metal-cutting methods and machinery. Electrical discharge machining (EDM) allows toolmakers to build tools, dies and moulds that could never before be imagined. Numerical control has brought the computer onto the shop floor.

To the student or journeyperson, this presents a new challenge — demanding imagination, patience, mechanical ability, deductive reasoning and, of course, skill as a craftsperson. The toolmaking technician program prepares students for these challenges in well-equipped shops and laboratories.

CAREER PROSPECTS:
Graduates of the two-year program can look forward to a career in the modern production process which includes machining, tool and die making, mouldmaking, quality control, process planning, estimating, designing, teaching and technical sales. Students who successfully complete this program may wish to pursue an apprenticeship as a machinist, tool and die maker, or mouldmaker.

ADVANCED STANDING:
Students who successfully complete this program may, on completion of the required design and engineering courses, enter the Mechanical Engineering Technologist — Design program.

SEMESTER 1	16 WEEKS
ENDR106	Engineering Design Theory I
MACH105	Machining Fundamentals I
MACH106	Manufacturing Processes
ENDR105	Computers in Engineering Applications I
MATH166	Applied Mathematics I
COMM120	College English (or COMM107A)

SEMESTER 2	16 WEEKS
MECH119	Engineering Design Theory II
ENDR123	Machining Fundamentals II
ENDR122	Computers in Engineering Applications II
SC101	Engineering Science I
MATH176	Applied Mathematics II
COMM122-130	Communications Choices

SEMESTER 3	16 WEEKS
ENDR205	Jig and Fixture Making
ENDR206	Computer Aided Manufacturing II
ENDR207	Jig and Tool Design I
MATH222	Applied Mathematics III
COMM131-140	Communications Choices

SEMESTER 4	16 WEEKS
MACH214	Die Making
ENDR216	Computer Aided Manufacturing III
MATH230	Applied Mathematics IV
ENDR217	Jig and Tool Design II
LIBS105-130	General Education Choices

For more information, call Robert Young at (416) 867-2000 ext. 4385 or Lorella Lee at (416) 867-2000 ext. 4525 between 8 a.m. and 4 p.m.

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see inside back cover

MECHANICAL ENGINEERING TECHNOLOGIST — DESIGN

GBC Code EN1200
Casa Loma Campus
32 Weeks (2 semesters)
To apply, see below

Starting: September
Certification: Certificate
No summer classes

PREREQUISITES:
Graduation from a recognized mechanical engineering technician program or its equivalent. If you're applying after you have completed another mechanical engineering program at George Brown, apply directly to George Brown. If you are applying from outside, apply to OCAS. (See page 8).

ABOUT THE PROGRAM:
This program's emphasis on automated design will enable the student to further develop the new skills he or she has obtained in a mechanical engineering technician program. To survive in a computer-oriented product design environment, employees need a solid grounding in this hi-tech field. George Brown's program allows students to hone these skills and provides industry with a knowledgeable and skilled employment pool. Centered around a well-equipped Computer-Aided Engineering Centre, the program exposes students to all aspects of computers as production and design tools in manufacturing. Graduates may expect to be integrated into the engineering field with a minimum amount of on-the-job training.

CAREER PROSPECTS:
The program is a high-technology level of training that emphasizes the skills required to become proficient in the field of computer-aided engineering. Graduates of the program can look forward to a career in the leading edge of engineering design, entering such areas as product design, consulting engineering design offices, part programming departments and industrial engineering offices.

SEMESTERS 1, 2, 3 AND 4
Courses in these semesters must be taken through one of the following five programs:

- Mechanical Engineering Technician — Design (EN117)
- Mechanical Engineering Technician — Tool and Die Maker (EN1040)
- Mechanical Engineering Technician — Drafting Design (CAD/CAM) (EN2010)
- Mechanical Engineering Technician — Mechatronics (EN122)
- Mechanical Engineering Technician — Quality Assurance

DESIGN

SEMESTER 5	16 WEEKS
ENDR347	Theory of Machines I
MATH360	Mathematics V
SC311A	Engineering Science IV
MECH III	Mechanics of Fluids
ENDR356	Computer Aided Design III
ENDR341	Machine Design I

SEMESTER 6	16 WEEKS
ENDR357	Theory of Machines II
MATH369	Mathematics VI
SC323	Engineering Science V
PHY301	Thermodynamics
ENDR363	Computer Aided Design IV
ENDR351	Machine Design II

For more information, call Paul Stevens at (416) 867-2000 ext. 4376 or Lorella Lee at (416) 867-2000 ext.4525 between 8 a.m. and 4 p.m.

MICROCOMPUTER AND PC SERVICING

GBC Code EL5770
Casa Loma Campus
1 Year (continuous for 52 weeks)
Apply to GBC

Starting: September, November and April
Certification: Certificate
Summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7) or Academic Upgrading Level 4 (see page 6) or an admissions test in English, math and science, plus satisfactory performance on a mechanical aptitude test.

ABOUT THE PROGRAM:
This program provides a technically qualified individual with a broad technical foundation and understanding of electronics and electro-mechanical equipment as they relate to office automation and word processing, as well as a basic understanding of computer programming, computer operating systems and telecommunications. Students learn hands-on general repairs of microcomputers and take subjects in five-week blocks.

CAREER PROSPECTS:
The program prepares graduates for employment and further on-the-job training as equipment service technicians in the rapidly expanding field of office automation and word processing.

ADVANCED STANDING:
Students who successfully complete this program may be eligible for advanced standing in the Electronics Engineering Technician program.

SEMESTER 1	20 WEEKS
ELCT502A	DC Circuit Characteristics
ELCT503A	AC Circuit Characteristics
ELCT504A	Electrical Circuits Laboratory
ELCT505A	Digital Fundamentals and Circuits
ELCT506A	Digital Circuits Laboratory
ELCT507A	Semiconductor Fundamentals and Circuits
ELCT508A	Semiconductor Circuits Laboratory
ELCT509	Passive Circuit Analysis (Applied Math)
ELCT532	Introduction to Computer System Software
ENG530	Business Practices and Communications (Part A)

SEMESTER 2	32 WEEKS
ELCT521A	Microcomputer Fundamentals
ELCT524A	Microcomputer Labs
ELCT595A	Principles of Interfacing
ELCT538A	Advanced Interfacing
ELCT537A	Advanced Computer Systems Software
ELCT536A	PC Systems Hardware
ELCT539A	Introduction to Data Communications
ELCT540A	PC Systems Lab
ELCT519	Active Circuit Analysis (Applied Math)
ENG530	Business Practices and Communications (Part B)

For more information, call (416) 867-2000 ext. 4753/4754 or (416) 867-2000 ext. 4755 between 8 a.m. and 4 p.m.

REFRIGERATION AND AIR CONDITIONING

GBC Code AR5470
Casa Loma Campus
36 Weeks
Apply to GBC

Starting: Continuous intake, every 12 weeks
Certification: Certificate
Summer classes, depending on start date

PREREQUISITES:
Grade 10 with credits at the general level and/or an admissions test.

ABOUT THE PROGRAM:
This program prepares people to enter an apprenticeship program leading to certification (compulsory in Ontario) as a journeyperson refrigeration and air conditioning mechanic. This program has a solid reputation in industry and college staff regularly consult industry representatives about the program. George Brown offers the largest hands-on training area of any college for this program. This is an excellent opportunity for people to enter a challenging trade that pays well. The Department of Skills Development will grant graduate students appropriate time off the apprenticeship period. The graduates are excused some of the in-school training of the apprenticeship program. The courses are presented in blocks of six weeks.

CAREER PROSPECTS:
Installer — The apprentice/graduate carries out installation duties assigned by a supervisor or a mechanic. These include running refrigerant and water lines, and siting and connecting up major items of equipment such as evaporators, condensing units and cooling towers. Inter-unit electrical wiring, siting controls and running control line circuitry are tasks that may also be allotted.

Serviceperson — The apprentice/graduate may undertake service work under the supervision of a mechanic. Troubleshooting and repairs to a wide range of heating, ventilating and air conditioning (HVAC) equipment will be carried out, involving both mechanical and electrical problems.

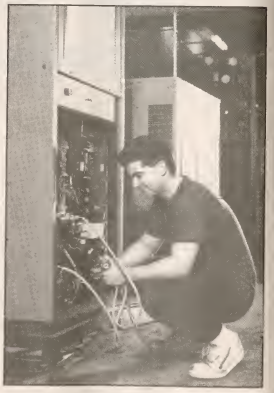
Salesperson — The graduate may work for an HVAC parts and equipment supplier. Duties include estimating and costing, advising customers on parts selection and consulting with manufacturers on a client's behalf. This position often leads to the offer of employment in the installation, maintenance or service fields.

Maintenance Mechanic — The graduate may assist in the installation, service and maintenance of the plant and equipment of employers such as a brewery, large factory or educational institution using HVAC equipment.

ADVANCED STANDING:
Students can get exemptions from basic apprenticeship training with their employer's approval.

COURSES	36 WEEKS
REF534	Electricity
MATH560	Mathematics
REF535	Refrigeration
MATH561	Mathematics
ARDR514	Drafting Blueprint Reading
REF536	Refrigeration
SBM534	Small Business Management
ARDR515	Drafting Blueprint Reading
REF537	Refrigeration
SBM535	Small Business Management
WELD515	Oxy-Acetylene Welding/Brazing/Cutting
SBM536	Small Business Management
REF538	Refrigeration — Air Conditioning
SBM537	Small Business Management
REF539	Refrigeration — Air Conditioning

For more information, call the co-ordinator at (416) 867-2000 ext. 4363 or Mechanical Systems Technology at (416) 867-2000 ext. 4360.



RESIDENTIAL CONSTRUCTION TECHNICIAN

GBC Code AR1210
Casa Loma Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 technical mathematics and English credits are required.

ABOUT THE PROGRAM:
Residential construction is a field that significantly differs from general construction. In close consultation with the Toronto Home Builders' Association, George Brown College has developed a program that is weighted heavily in the technical area with a considerable portion of school time spent in the areas of business organization and management.

The students learn the concepts of designing and producing working drawings for a single-family residence in accordance with the Ontario Building Code regulations and accepted standard practices in the field as pertaining to the home building industry.

This program is unique in Ontario.

CAREER PROSPECTS:
Graduates can expect to be hired as assistant job site superintendents, site clerks or assistant inspectors on the construction site with a contractor or builder, or as assistants in the office in designing, drawing, project planning, costing or expediting.

Several graduates have become successful entrepreneurs in the new residential construction field as well as in the renovation industry.

ADVANCED STANDING:
Students who successfully complete semesters 1 and 2 may enter semester 3 of this program or semester 3 of the Construction Engineering Technician or Technology programs or the Civil Engineering Technician or Technology programs.

SEMESTER 1	16 WEEKS
BT118	Construction Materials I
BT119	Site Surveying I
BT114	Introduction to Commercial/Industrial Construction
BT127	Structural Steel I
MATH166A	Mathematics
MECH100	Mechanics
COMM120	College English (or COMM107A)
GENED	General Education

SEMESTER 2	16 WEEKS
BT120	Construction Materials II
BT128	Site Surveying II
BT126	Introduction to Computers
BT123	Introduction to Residential Construction
BT129	Reinforced Concrete I
MATH176	Mathematics
MECH120	Mechanics
LIBS105-130	General Education Choices

SEMESTER 3	16 WEEKS
RCM231	Building Construction and Drafting I
RCM232	Building Construction and Codes I
RCM233	Project Management and Scheduling I
SBM166	Small Business Management I
RCM235	Contracts and Specifications
RCM236	Quantity Surveying and Estimating
RCM237	Computer Applications (financial management)
CAD231	Computer Aided Drafting
COMM122-130	Communications Choices
GENED	General Education

SEMESTER 4	16 WEEKS
RCM241	Building Construction and Drafting II
RCM242	Electrical Services
RCM243	Mechanical Services — Plumbing
RCM244	Mechanical Services — Heating
RCM245	Project Management and Scheduling II
RCM246	Applied Mechanics — Timber Design
RCM247	Computer Applications (business plan)
RCM248	Quantity Surveying and Estimating
SBM176	Small Business Management II
LIBS105-130	General Education Choices
COMM131-140	Communications

For more information, call the co-ordinator at (416) 867-2000 ext. 4397 or Architectural Engineering office at (416) 867-2000 ext. 4391.

STATIONARY ENGINEERING — 4TH CLASS

GBC Code AR5480
Casa Loma Campus
40 Weeks
Apply to OCAS

Starting: September
Certification: Certificate
No summer classes

PREREQUISITE:
Admission test. General or technical math and English at a Grade 10 level are required.

ABOUT THE PROGRAM:
This program provides instruction in all modules required for accreditation toward the 4th-class level of stationary engineering. In addition, practical training in boiler operation, together with ancillary equipment, is provided in a modern, well-equipped registered power plant used exclusively for training purposes. Students will receive some training in the programmable monitoring process involving computerized systems. In addition, troubleshooting, using simulated power plant conditions, will be possible with computerized equipment.

Successful completion of the program entitles the student to the 4th Class Certificate of Qualification issued by the certifying ministry; however, this is contingent upon full attendance and modular accreditation. Although the objective is 4th class certification, graduates are in an advantageous position to continue with studies at the 3rd-class level.

This program is unique in Metro Toronto.

CAREER PROSPECTS:
Possession of a Stationary Engineer Certificate of Qualification 4th Class permits the graduate to seek employment as a certified stationary engineer in any registered power plant irrespective of its size. While the 4th class certificate is the lowest of the four levels of qualification, opportunities exist for progression through the higher levels by combining employment and accreditation obtained by passing modular examinations. Fourth class engineers are also employed in a maintenance capacity in plants not necessarily required (by law) to have engineers in attendance.

ADVANCED STANDING:
Students who complete this program, and are certified with a 4th class stationary engineering licence by the Ontario Ministry of Consumer and Commercial Relations, are eligible to enter the second year of the Stationary Power Plant Engineering program.

COURSES	40 WEEKS
STAT549	Power Plant Laboratory
STAT550	Power Plant Mechanical Maintenance
STAT555	Power Plant Chemistry I
STAT556	Power Plant Boilers and Auxiliaries I
STAT557	Power Plant Heat, Refrigeration, Air Conditioning I
STAT558	Power Plant Instrumentation and Control I
STAT559	Power Plant Lubrication — Internal Combustion Engines
ELT514	Power Plant Electricity
SC552	Power Plant Applied Science
STAT560	Power Plant Chemistry II
STAT561	Power Plant Integrated Computer Control Systems

For more information, call the co-ordinator at (416) 867-2000 ext. 4364 or Mechanical Systems Technology at (416) 867-2000 ext. 4360.

STATIONARY POWER PLANT ENGINEERING

GBC Code AR1180
Casa Loma Campus
2 Years (4 semesters)
Apply to OCAS

Starting: September
Certification: Diploma
No summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7). Grade 12 technical mathematics.

ABOUT THE PROGRAM:
A complete shop area used exclusively for teaching purposes enables students to prepare for a career as a 4th or 3rd class stationary power plant engineer. Students learn about the operation and management of power equipment used to serve industry, and about computerized systems involved with the programmable monitoring process. They also learn to troubleshoot, using simulated power plant conditions, in a shop area designed specifically to meet industry needs in southern Ontario. Two months of on-the-job training in Semester 4 give students further work experience and qualifying time for certification. While the full program prepares them for a 3rd-class level, it also includes content related to 2nd-class level that enhances career prospects for graduates. Provincial legislation on standards and certification is incorporated into the program. Students who successfully complete the first year (semesters 1 and 2) and six Ministry of Education and Training (MET) modular block exams may apply for provincial certification as a 4th class stationary power plant engineer. They may also go on to second year (semesters 3 and 4), complete their work experience, and write another six MET exams in order to apply for certification as a 3rd class stationary power plant engineer.

This program is unique in Ontario.

CAREER PROSPECTS:
Graduates with 3rd class certification are in a good position to obtain employment. Because of this program's training, graduates are in an advantageous position to move to the 2nd class level by continuing with either extension class or correspondence studies. Positions of higher responsibility are attainable in this occupation with 2nd or 1st class certificate of qualification.

SEMESTER 1	16 WEEKS
SPPE1012	Power Plant Operation — Phase I
SPPE1013	Power Plant Mechanical Maintenance — Phase I
SPPE1014	Power Plant Integrated Computer Control Systems
SPPE1006	Power Plant Boilers and Auxiliaries I
SPPE1009	Power Plant Chemistry I
SPPE1005	Power Plant Electricity and Instrumentation I
GENED	General Education

SEMESTER 2	16 WEEKS
SPPE2022	Power Plant Operation — Phase II
SPPE2023	Power Plant Mechanical Maintenance — Phase II
SPPE2024	Power Plant Integrated Computer Control Systems II
SPPE2002	Power Plant Applied Science I
SPPE2004	Power Plant Heat, Refrigeration, Air Conditioning I
SPPE2007	Power Plant Applied Mechanics I
GENED	General Education

SEMESTER 3	16 WEEKS
SPPE3010	Power Plant Design and Operation — Phase I
SPPE3011	Power Plant Mechanical Maintenance — Phase III
SPPE3014	Power Plant Integrated Computer Control Systems III
SPPE3004	Power Plant Heat, Refrigeration, Air Conditioning II
SPPE3002	Power Plant Applied Science II
SPPE3007	Power Plant Electronics and Instrumentation II
GENED	General Education

SEMESTER 4	16 WEEKS
SPPE4020	Power Plant Design and Operation — Phase II
SPPE4025	Power Plant Mechanical Maintenance — Phase VI
SPPE4005	Power Plant Boilers and Auxiliaries II
SPPE4001	Power Plant Supervision and Management
ENG4010	Power Plant Communications
SPPE4006	Power Plant Applied Mechanics II
SPPE4024	Power Plant Integrated Computer Control Systems VI
SPPE4008	Power Plant In-Plant Training
SPPE4010	Power Plant Chemistry II
GENED	General Education

For more information, call the co-ordinator at (416) 867-2000 ext. 4364 or Mechanical Systems Technology at (416) 867-2000 ext. 4360.

VIDEO SYSTEMS AND SERVICE

GBC Code EL5870
Casa Loma Campus
1 Year (continuous for 48 weeks)
Apply to GBC

Starting: September, January
Certification: Certificate
Summer classes

PREREQUISITES:
Ontario Secondary School Diploma (with credits at or above general level) or equivalent, or mature student status (see page 7) or Academic Upgrading Level 4 (see page 6) and an admissions test in English, mathematics, algebra and science.

ABOUT THE PROGRAM:
The program provides training for individuals to become qualified in the principles and maintenance of radio, hi-fi, TV and basic video systems, with the ability to diagnose, locate and repair faults.

This program is unique in Metro Toronto.

CAREER PROSPECTS:
The program prepares the graduates for employment and/or further on-the-job training in this diversified field of electronics. Opportunities for employment exist with retailers, wholesalers and manufacturers in the service and/or sales departments.

SEMESTER 1	20 WEEKS
ELCT502A	DC Circuit Characteristics
ELCT503A	AC Circuit Characteristics
ELCT504A	Electrical Circuits Laboratory
ELCT505A	Digital Fundamentals and Circuits
ELCT506A	Digital Circuits Laboratory
ELCT507A	Semiconductor Fundamentals and Circuits
ELCT508A	Semiconductor Circuits Laboratory
ELCT532	Introduction to Computer System Software
ELCT509	Passive Circuit Analysis (Applied Math)
ENG530	Business Practices and Communications (Part A)

SEMESTER 2	28 WEEKS
ELCT510	Linear Circuit Applications
ELCT511	Linear Circuits Laboratory
ELCT512	AM-FM Stereo Fundamentals and Circuits
ELCT513	AM-FM Stereo Radio Circuits Laboratory
ELCT518	Television System Introduction and Laboratory
ELCT542	Video Tape Recorder and Camera Theory
ELCT543	NTSC Transmission and Standards
ELCT544	NTSC Processing Circuits
ELCT545	Video Tape Recorder Laboratory
ELCT519	Active Circuit Analysis (Applied Math)
ELCT530	Business Practices and Communications (Part B)

For more information, call (416) 867-2000 ext. 4753/4754 or (416) 867-2000 ext. 4755 between 8 a.m. and 4 p.m.

PART-TIME AND EVENING COURSES
Call 867-2464 or 1-800-263-8995

WELDING FITTER

GBC Code EN5510
Casa Loma Campus
36 Weeks
Apply to OCAS

Starting: September
Certification: Certificate
No summer classes

PREREQUISITES:
Grade 10 technical mathematics and English at or above general level or equivalent or mature student status (see page 7) or an admissions test.

ABOUT THE PROGRAM:
This well-established program takes place in the college's excellent shop facilities. Students get sound practical instruction, together with appropriate theory, in all of the major welding processes now used in industry. Graduates will be able to meet recognized industrial standards of competence in the use of the shielded metal arc (SMAW), gas metal arc (GMAW), flux-cored arc (FCAW), gas tungsten arc (GTAW) and oxy-acetylene welding and cutting processes. Graduates will be eligible to take a practical all-position SMAW test to qualify for certification for pressure welding at the Ontario Ministry of Consumer and Commercial Relations. Graduates will also have a sound knowledge of the fundamentals of fabrication procedures and the interpretation of shop drawings.

CAREER PROSPECTS:
The steel fabricating industry is extremely diversified, producing a wide range of products. Consumer goods, automobiles, structural steel components for buildings and bridges, pressure vessels and industrial and transmission piping installations are all examples of products requiring skilled welders. A graduate from the Welding Fitter program possesses skills to enter any of these interesting fields and advance towards positions of responsibility in the welding field.

SEMESTER 1	18 WEEKS
WELD550	Welding Theory
WELD540	Oxy-Acetylene Welding/Brazing/Cutting
WELD541	Shielded Metal Arc Welding
WELD542	Fabrication
ENDR575	Drawing Layout and Calculation
ENG530	Industrial Communications

SEMESTER 2	18 WEEKS
WELD550	Welding Theory
WELD540	Oxy-Acetylene Welding/Brazing/Cutting
WELD541	Shielded Metal Arc Welding
WELD542	Fabrication
WELD543	Gas Tungsten Arc Welding
WELD544	Gas Metal Arc Welding
ENDR575	Drawing Layout and Calculation

For more information call (416) 867-2000 ext. 4400 between 8 a.m. and 4 p.m.

ADVANCED WELDING

GBC Code AR5650
Casa Loma Campus
36 Weeks (2 semesters)
Apply to OCAS

Starting: September
Certification: Certificate
No summer classes

PREREQUISITES:
Grade 12 math (technical) and physics with previous welding experience. Welding experience from welder/fitter or industry.

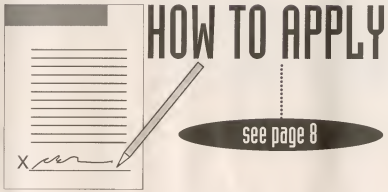
ABOUT THE PROGRAM:
This program was designed to introduce technology welding processes and laser technology to students and prepare students for industrial manufacturing.

This program is unique in Ontario.

CAREER PROSPECTS:
Graduates will be qualified for positions as quality control inspectors and laser operators for material processing.

COURSES	18 WEEKS (2 SEMESTERS)
TTP501	Academic/Technical
TTP502	Trades/Technical

For more information, call Brian Glen at (416) 867-2000 ext. 4349 or between 8 a.m. and 3 p.m.



WOMEN INTO TRADES AND TECHNOLOGY

GBC Code AR5650
Casa Loma Campus
18 Weeks
Apply to OCAS

Starting: October, February
Certification: Training profile issued
No summer classes

PREREQUISITES:
Admission test prior to interview.

ABOUT THE PROGRAM:
This program provides women who have not previously worked with hand and power tools with a chance to develop skills in a variety of trade and technical areas. It is a good introduction to a range of areas in trades and technology. A practical hands-on method of learning is emphasized and students are encouraged to learn a logical approach to mechanical and electrical problem-solving, which is essential in most trade areas.

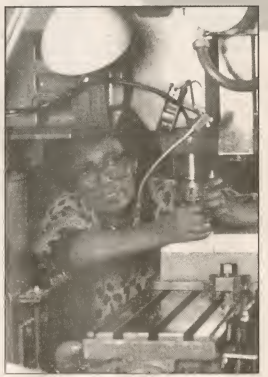
Students are also exposed to academic/technical subjects including basic blueprint reading, technical English and mathematics. This combination of shop and academic instruction gives students the "catch up" skills and self-confidence needed to continue in a non-traditional career path.

To assist students in confirming/selecting their career goals, educational and industrial tours covering a wide range of technology and trades are conducted during the program. After being exposed to a range of skill areas, students may wish to pursue one preferred area with further study in a George Brown program or they may wish to apply for an apprenticeship.

CAREER PROSPECTS:
Graduates have gone on to train in such programs as: CAD/CAM, numerical control, machine shop, aircraft maintenance technician, electrical engineering, refrigeration and air conditioning and major appliance servicing, electronics, drafting, truck driving, heavy equipment operator, offset printing, cabinet making, welding, masonry and power engineering.

COURSES	18 WEEKS
TTP501	Academic/Technical
TTP502	Trades/Technical

For more information, call Doug Todd at (416) 867-2000 ext. 4388 between 9 a.m. and 3 p.m.



APPRENTICESHIP

WHAT IS APPRENTICESHIP?

It is an agreement between a person like you who wants to learn a skill, and an employer who needs a skilled worker. Both the person who is learning and the employer who is training benefit from an apprenticeship. The apprentice becomes a fully qualified journeyperson, with skills that can provide him or her with a rewarding career. The employer gains a skilled worker who can help the company succeed.

HOW LONG DOES AN APPRENTICESHIP LAST?

Apprentices learn their skills through on-the-job practice. They spend two to five years learning their trade. About 90 per cent of the time is spent in the workplace. The rest is usually spent at a community college. While apprentices are learning, they are earning, too. Their employers pay them while they are training.

WHAT ARE THE ENTRANCE REQUIREMENTS?

In most trades, the minimum educational requirement is Grade 10. Employers and unions may insist, however, that applicants have a higher educational level as well as credits in specific subjects. Apprentices must be at least 16 years old.

WHO CAN I TALK TO FOR SUPPORT AND INFORMATION?

People registered as apprentices and people interested in seeking apprenticeship can call the George Brown College Access to Apprenticeship Office at (416) 956-7351.

HOW DO I REGISTER?

Apprentices are registered by the regional offices of the Ministry of Education and Training. You cannot register for an apprenticeship at George Brown College. Either you or your future employer can call the regional office and ask one of the consultants to visit your workplace. The consultant will make sure that you both understand what apprenticeship is all about.

The following apprenticeship programs are offered at George Brown College, but you must register for these programs with the Ministry of Education and Training. See the phone numbers listed below.

PROGRAM TITLE

- Appliance Servicing
- Baker 2 — Basic and Advanced
- Baker — Branch 3 (Patissier)
- Carpenter — General
- Cook II — Basic and Advanced
- Electricol (Construction and Maintenance)
- Glazier and Metal Mechanic
- Hairstyling — Basic
- Hairstyling — Advanced
- Industrial Electronic Controls
- Industriol Mechanic (Millwright)
- Ironworker
- Machine Printing Offset
- Millwright (Construction)
- Plumber
- Radio and TV Servicing
- Refrigeration and Air Conditioning
- Retail Meat Cutter
- Sheet Metal Worker
- Sprinkler and Fire Protection Installer
- Steamfitter

For more information on apprenticeship programs visit or write to the Apprenticeship and Client Services Branch, Ontario Training and Adjustment Board (OTAB), at 625 Church St., 1st Floor, Toronto, Ont. M4Y 2E8, or call 1-800-387-5656. Or you can call your local apprenticeship field office:

Toronto Central: (416) 326-5800
Toronto East: (905) 837-7721
Toronto West: (905) 279-7333

Course descriptions are subject to change and not all courses appear in this listing. The following courses are listed in alphanumeric arder by course code.

AC100 Quality Assurance
Introduction to the principles of measurement analysis in a manufacturing environment. Areas covered include quality planning, basic statistical concepts, processes, measurement system analysis.

ACC100 Introduction to Accounting I
The accounting cycle including calumnar journals, subsidiary ledgers, wark sheets, adjusting and closing entries financial statement, nates and interes, payrall account, vaucher system.

ACC102 Accounting for Decision-Making
Emphasis is an accounting as a decision-making tool. Topics include accounting for inventories and fixed assets, partnerships and corporations, responsibility accounting, manufacturing accounting, budgeting and financial analysis.
Prerequisite: ACC100.

ACC103 Intraductory Accounting
Accounting is the language of business. This course prepares the student to make good managerial decisions based an financial information. In this course, the student will learn the basics of accounting.

ACC104 Intermediate Accounting/Hospitality
Build on knowledge gained in the basic accounting cause. Students learn to use basic financial information ta prepare statements and financial reports. Prerequisite: ACC103.

ACC106 Introduction to Accounting
Given examples, instructians and transaction data, students will demanstrate in class assignments and on tests their ability to understand and apply the basic concepts of the recarding processes leading up to the final presentatian af financial statements in service and merchandising firms.

ACC109 Accounting I
See ACC103

ACC110 Accounting II
See ACC104 Prerequisite: ACC109.

ACC113 Accounting - Methods and Techniques
An introduction to the concepts and terminology of accounting, sales and management personnel, understanding fundamental principles in accounting skills.

ACC114 Financial Statements - Development, Use and Application
Learn preparatian and analysis pracedures, recording of business transactions, cash management including investment and/or distribution of surpluses and estate and succession planning.
Prerequisite: ACC100.

ACC117 Introduction to Accounting II
Accounts receivable, valuation af inventories, depreciation and depletian, intangible assets, accounting principles, partnership accounting, corporate organization and aperations, current and long-term liabilities, statement of changes in financial positian (cash basis) and an overview af manufacturing accounting. Lotus 1-2-3 applications are an integral part af this course.
Prerequisite: ACC100.

ACC119 Accounting for Decision Making
The student will analyze financial reports and interpret the results and also describe the managerial decision processes and identify the uses of accounting information by managers of business. Emphasis will be placed an the use af accounting data as a decision-making tool.

ACC126 Introductory Accounting
Gain an understanding of the accounting process as applied to a service organization, the mechanics af the accounting cycle from the recarding of the original entry through the preparatian af financial statements, petty cash and the bank reconciliatian statement.

ACC151
A continuatian af ACC113.

ACC200 Financial Accounting I
Emphasis is an the underlying theoretical structure af accounting. Topics include a review af accounting principles and concepts and financial statement preparatian, valuatian of current assets and liabilities, and the valuatian af aperational assets. Prerequisite: ACC117.

ACC202 Management Accounting I
A general averview af managerial accounting including cast terms, job arder casting, process casting, cast behaviour and cast-volume-profit relationships, segment reparting, contribution income statements and profit planning. Prerequisite: ACC117.

ACC203 Financial Accounting II
Topics include formatian and capital structure of limited companies, accounting for bonds as lang-term liabilities and investments, accounting for income tax, pensians and lease casts, statement af changes in financial positian (cash basis), analysis af financial statements and inflatian considerations in accounting. Prerequisite: ACC200.

ACC204 Management Accounting II
Standard casts, flexible budgets, central af decentralized aperations, and relevant costs for decision-making, including consideratian af pricing products and services, service department allocations and capital budgeting concepts. Prerequisite: ACC202.

ACC205 Auditing
The principles and practices af auditing and emphasizes strang internal control systems, evaluatian af internal cantral systems, choice and evaluatian af evidence, preparatian af audit warking papers, audit af computerized systems and communicatian in audit findings. Prerequisites: ACC200 and ACC220.

ACC207 Financial Management
Explare the accounting functions of the hospitality business. The emphasis is an the financial data that may be acquired and from which management decisions may be made. Topics include:
ACC103/109, ACC104/110, FCC104.

ACC213 Accounting
Learn about the production and understanding af financial statements, budget preparatian, capital budgeting and the designing af systems accounts and journals that best serve the cantral needs af the praperty management industry.

ACC216 Advanced Accounting for Foshion
Learn business theory as it relates to the methods and techniques af accounting, current and lang term liabilities, partnership accounting, organizatian and aperatian af carporations.

ACC220 Accounting Information Systems I
The use af computerized information systems in a modern business environment, organizational structures, computer hardware and software, system cantrals and flawcharting. Latus 1-2-3 applications are incarparated into the caurse. Prerequisites: ACC117 and IS115.

ACC222 Accounting Information Systems II
Microcamputer accounting applications, systems studies for accounting information systems (including analysis, design, implementation, and resource acquisitian) and case studies on various system topics. The ACCPAC application is demonstrated. Prerequisite: ACC220.

ACC225 Management Accounting
For non-accountants wha want an understanding af managerial accounting techniques used in planning, organizing and controlling aperations within a company. Prerequisite: ACC102.

ACC262
A continuatian af ACC216.

ACC300 Advanced Management Accounting
Cast-volume-profit analysis, responsibility accounting and motivation, standard casts, flexible budgets, relevant casts, joint-product casts, segment performance measurment, mix and yield variances and linear programming. Prerequisite: ACC204.

ACC301 Taxation
Personal and corporate income taxation in Canada. Learn to compute taxable incame and taxes payable, which includes the calculatian af income from employment, business, and praperty, capital gains and lasses, the capital cast allawance system, basic tax planning.

ACC302 Internal Auditing
The basic concepts and techniques af internal auditing, with particular emphasis an the role af the internal audit functian in evaluating the efficiency and effectiveness af bath accounting and aperational systems, the relationship with the external auditar, evaluatian af internal cantrals, effectiveness af various management structures and the communicatian af audit findings. Prerequisite: ACC205.

ACC303A Finance
Examine the process af capital budgeting and procedures for raising funds through the Canadian capital markets. Prerequisite: BUS321.

ACC306 Advanced Financial Accounting I
Learn accounting far inter-carporate investments, including consolidatian under the purchase method, consolidatian af wholly-awned and non-wholly-awned subsidiaries, reporting in subsequent years, pooling af interests and additional consolidatian topics. Prerequisite: ACC203.

ACC307 Advanced Financial Accounting II
Additional aspects af inter-carporate investments, segmented reparting, accounting for international activities, including foreign currency translatian and reporting an foreign aperations, accounting for non-profit organizations and fund accounting.
Prerequisite: ACC306.

ACC576 Hospitality Accounting Procedures
Learn to follow simple, basic procedures used in the hospitality business to maintain accountability and control over revenues and assets, focussing on those contrals that fall within the responsibility af a server or bartender.

ACCL502 Labour Cast Control
See FC104 Prerequisite: PUR505.

ACCU300 Computer Grading and Marker Making
Learn the fundamentals af operating the AccuMark System, how to prepare rule tables and pattern pieces for digitizing, digitize and plat pieces, and how to make markers and plat them.

ACT100 Human Growth and Development
Provides a multi-disciplinary averview af human growth and development from conceptian to death. Examine different models af psychological, social and physical development.

ACT103 Ambulation and Exercise
Through demonstratian and practise, gain the skills necessary to promate and maintain fitness amang both the well and the frail elderly. Specific topics include fitness, exercises for gross motor/fine motar, perceptual and locamotar skills, adaptations for specific disabilities, the safe use af wheelchairs, and the use af ambulatian aids such as wheelchairs, walkers and canes.

ACT104 Activity Planning
Learn how to meet the psycha-social needs af the elderly through activity programs by planning the total activity program, implementing the program and evaluation at the program.

ACT105 Use of Crafts and Hobbies
Learn to abserve, practice and analyse a variety af craft and habby skills, and techniques and devices used to adapt these skills far the aged and people with disabilities.

ACT106 Narmalization and Remotivation
The use af a particular therapeutic technique, Remativation therapy, intended to help clients remotivate and reinvalve themselves and areas in which the institutional environment can be normalized.

ACT109 Group Process I
This course provides learning at a thearetical and experiential level which will result in improving the students' understanding af themselves through the group process and thus further the ability to wark effectively in a variety af groups.

ACT110 Special Needs
The skills needed to communicate effectively with elderly people wha have hearing, speech, visual and/or cognitive impairments, an introductian to Alzheimer's Disease, back care and adaptive devices for activities af daily living are studied.

ACT119 Group Process II
develop an understanding af knowledge, skills, attitudes and the significant roles af group leaders/members at a thearetical and experiential level. Prerequisite: ACT109.

ACT208 Assessment Skills
Learn the skills needed to assess an individual's physical, social, emotional, intellectual and spiritual needs and interests, techniques for performing a helping interview with the elderly client, forms used for the purpose or recarding assessment finding and charting techniques in current use in the field.

ACT210 Organization and Management Skills I
The principles af organizatian and management to prepare the student for effectively supervising an Activity Departmert.

ACT211 Organization and Management Skills II
The professianal management af the Activity Departmert and prepares the student far the entry into the workforce.

ACT212 Psychogeriatrics
Learn about behavioural disturbances with emphasis an those most commonly found in the elderly papulatian. Topics include chronic mental health problems, such as dementias, neuroses, as well as effective behavioaurial disarders and addictians.

ACT214 Counselling Skills
Basic concepts and skills af counselling will be discussed, demonstrated and practised. These will be related and applied to the developmental needs and issues of the elderly.

ACT215 Community Resources
This course examines the community resources utilized to meet the needs af the elderly. The student will identify, classify and analyze existing social services. Guest lecturers and group presentations are incorporated into the course.

ACT217 Program Development and Evoluation
A variety af models serving as a framework far group wark with the elderly, the thearetical and practical techniques used to develop specialized programs, methods used to evaluate the effectiveness af these programs.

ACT226 Therapeutic Programming
Learn about programs designed to meet the psychasacial and physical needs af the maderate to severe cognitively impaired elderly client, thearetical and practical techniques used to develop specialized programs far those with Alzheimer type syndrome, evaluative methods that determine the effectiveness af these programs.

ACT227 Values, Ethics and Professionalism
Learn to clarify values, understand ethical and moral issues and develop an understanding af professionalism in preparatian for entry into the workplace.

ACUP200 AccuMark 300 (PDS)
Learn system skills and gain the knawledge for patternmaking using PDS.

ADES503 Advertising Design I
the steps necessary to generate and produce print advertising af a professianal calibre far the consumer market.

ADES511 Advertising Design II
Apply knawledge and drawing skills to create professianal calibre wark from rough layauts ta final art.

ADM201 Exercise Class Leadership
Learn the principles and precautians necessary in the design and leading af an effective, saund and enjayable activity class.

ADM204 Fitness Management I
Learn jab search techniques in fitness and the business of fitness. financial management, facility management, marketing and promotian, human resource management in reference to the fitness industry, and manogement issues. Gain practical experience and apply this knowledge to aperate and manage an Employee Fitness Centre within the college.

ADM214 Fitness Management II
The administrative demands that are placed an fitness professionals. Develop computer skills preparing various assignments, writing propasals, researching equipment or developing a marketing plan, learn industry trends along with social and ecanamic trends and the implications far providers af fitness services.

ADV201 Advertising I
The vital relationship between wards and visuals as they combine to form exciting advertising concepts, explore designs that communicate clearly and with maximum impact in national newspapers and magazines, the fast, clean use af markers to render layouts and their mounting and presentatian, the appropriate selection af type as well as type rendering, the use and importance af photography in advertising.

ADV211 Advertising II
The development of exciting advertising concepts for consumer and trade magazines and outdaar and transit advertising, aspects af design, rendering and typography, the importance af marketing and media selection, the steps from concept through roughs, camps, photography, typesetting and assembly, a wide range of creative approaches in print and televisian.

ADV302 Carporate Image Advertising I
The means of product and company identification as used in advertising, the development af slogans and their animated visualizatian for TV, corporate spokespersons and campaigns which are designed to establish a particular image for a company or product.

ADV305 Advertising III
By using a combinatian af skills and knawledge, students design and write advertising for televisian, render story boards and study award winning commercials from around the warld. The course traces development af national advertising from research through marketing, media planning, creative and production, as the student warks to professianal standards in broadcast and print.

ADV312 Corporate Image Advertising II
Product and company identification in advertising, the development of slogans, carparate symbols and lang term campaigns, establishing a budget for media, production and artwark, lateral thinking and brainstarming.

ADV315 Advertising IV
This course continues to emphasize a high level af canceptual thinking as it applies to multi-media campaigns scheduled to coincide with other courses, combining to produce a very complete portfolio. The wark program provides the student with the opportunity to experience an actual advertising agency envirarnment.

AIR111 Refrigeration
The topics af heat: quantity, type, intensity, temperature scale conversian, refrigerant loads, gas laws and properties, system campanent analysis and selection, refrigeration and heat pump cycles, piping layaut, system capacity cantrol, and accessory selection and applicatian, the types af systems available.

AIR112 Heat Loods
Basic thermadynamics, properties af material cambinations in heat transfer, human camfort, development af heat transfer equations, humidity, psychametrics, building heat storage effect and solar load analysis, building code requirements far H.V.A.C. systems, heating and cooling load determinatian using C.S.H.R.A.E. procedures and manuals, and equipment selection procedures.

AIR113 Electricity
Electran theary and current flaw, magnetism, voltage drap, resistive and inductive circuits, capacitance, D.C, and A.C. supplies including palyphase circuits, inductive and capacitive reactance, impedance in A.C. circuits, and electric motars and their contral.

AIR114 Refrigeration Lab
An introductian to refrigeration and air conditioning, materials, tools and instruments, with typical applicatians, pursuance af projects relating to testing, measurement and evaluatian af a variety af systems, and an analysis of typical problems arising and af remedial actian required.

AIR115 System Design
H.V.A.C. system evaluatian, static, velacity and total systems pressures, friction, impact, aspiratian and turbulence in air flaws, fan curves, air duct sizing and layaut in residences, and system adjustment and balancing procedures.

AIR116 Electricity
The development of pictarial and schematic diagrams, basic central circuitry and campanents found in H.V.A.C. systems, and construction and analysis af ladder schematics incarparating central and safety devices.

AIR205 System Design
A review af first year design theary, further investigatian af gas laws, tables, and equatians are cavered, as well as commercial load calculatian procedures, using A.S.H.R.A.E. material and code standards, and advanced psychametric analyses, including evaparative and mixed air pracesses.

AIR206 Controls
Two- and three-wire and proportional central circuitry, camputer-aided drafting programs to lay out an advanced central circuit, hands-an lab wark involving sections af the circuit studied, together with campanent explanatian.

AIR207 Refrigeration
Advanced piping applications, including superheat selection, multitemperature systems, lubricating oil-analysis, selection, acids and viscasity, oil flaw in systems, heat pump systems, staging and campounding in mechanical refrigeration systems and water treatment.

AIR208 System Design
The Static Regain and Equal Friction methads at commercial duct design, air distribution patterns, air terminals, fan laws, fan performance value construction and selection, water pump characteristics and selection, and system characteristics and operatians.

AIR209 Controls
An introductian to pneumatic systems with detailed explanatian of construction and function devices in bath pneumatic and electrical central systems, comparisan and evaluatian at central campanents.

AIR210 Refrigeration Lab
Super heat measurement and adjustment, multi-temperature applicatians, piping pressure drap determinatian, oil analysis, refrigerant analysis and identificatian, plotting fan curves and system test procedures.

AIR211 Estimating
Take-offs of mechanical warking drawing for ducts, piping and machine room layouts, preparatian af bills at materials and costing for light industrial and institutianal H.V.A.C. systems and drafting sales propasals and cast averheads, the use af computer spreadsheets for estimating purpases.

AIR216 Computer Applications
Fundamentals of operating micracamputers and introduction to various software packages, including spread sheets, wark processing, and DOS, methods af integrating software via DOS, computer aided drafting (CAD) using Autosketch and AutoCAD software, packages used to build electrical central system schematics, manual drafting.

AIR225 Drafting
An introductian to computer aided drafting (CAD) using Autosketch and AutaCAD variant, building electrical central schematics, manual drafting.

AIR301 System Design
All air systems including terminal reheat, variable air volume, dual duct and multizone, air and water systems such as air water induction systems and fan coil and unit ventilatian systems, detailed design of a medical clinic and the design project of a commercial office building using a water source heat pump.

AIR306 Computer
The use of microcamputer and developed software to calculate commercial heat loads, develop a commercial air duct design using either static regain or equal friction methods and select and cast required equipment.

AIR308 H.V.A.C. System Design
Investigatian af indoor air quality (I.A.Q.) problems and their resolutian, thermal storage practices and techniques including load shifting, ice making, campressar and equipment sizing and load levelling, a detailed design project af an office building using variable air volume (V.A.V.) design applicatians.

AIR314 Refrigeration
The development of a camputer program to perform refrigeration load calculations, using advanced spreadsheet software, the design and layaut of various refrigeration systems, including freezers, using CAD, the selection and supply af refrigeration equipment, and the aperation af lithium bramide systems and ground source head pump systems.

AIR315 Energy Management
The aperation of programmable cantrollers in H.V.A.C. systems, and the development af programs using several different programmable logic cantrollers (P.L.C.) software programs, canversian from canventional to P.L.C., and the development af P.L.C. programs far building energy conservatian purposes.

AIR316 Contract Administration
The cantracting process, preparing cantract propasals and forms, cantractual chains and the flaw-down process, terms and canditians, clauses and their implications in cantract tiers, liens, liquidatian and consequential damages, use af bands, nandisclasure agreements, canditional purchase orders/hold harmless, change arder process, computer word processing for document praduction.

ANAT113/114 Anotomy and Physiology I
Levels of organizatian, the skeletal system, the muscular system, the nervous system, the gastrointestinal system, the cardiavascular system, the respiratary system and the urinary system.

ANAT115 Anotomy and Physiology of the Lower Extremities
Pravides the chiropady student with a detailed knowledge of the normal onatamy and physiology of the lower extremities. The use af radiographs as diagnostic aids will be discussed.

ANAT111/107 Anotomy for O.P.L. II
This course facuses on functional skeletal and muscular anatamy, especially as it relates to arthatic and prasthatic fit and function, the anatamy and function af all the major joints, blood vessels and nerves.

ANAT117 Ora-Facial Anatomy
A lecture and independent learning course designed to teach the student basic dental terminology, the three major notation systems, the development, structure, form and function of teeth, eruption chronology, the functional relationships of the teeth and their supporting structures, basic head and neck anatomy.

ANAT123/124 Anatomy and Physiology II
The endocrine system, reproduction, the cardiovascular system, cardiovascular-respiratory integration, acid/base balance in the body, genetics, microbiology, non-specific body defences and the immune system, and special senses.

ANAT127 Functional Anatomy and Physiology
Gain a knowledge base respecting the anatomy and physiology of the human hearing mechanism, hearing disorders and pathology.

ANAT127A Functional Anatomy and Physiology
Gain a knowledge base respecting the anatomy and physiology of the human hearing and equilibrium mechanism.

ANAT205 Advanced Head and Neck Anatomy
The skull, muscles of mastication and the T.M.J., the origin, pathway, functional component, and structures innervated by cranial nerves V, VII and IX, an overview of the ANS, extra and intracranial blood supply, and routes and spread of dental infection.

AP105
See ELS121

AP105
See ELS119

AP112 Day Care Assistant's Course
This full-year course will improve the student's grammar and essay-writing skills, practice in journal writing, oral presentation skills, non-judgemental observation, report-writing and media reports on children's issues.

APL534 Electricity for Appliances
Electron theory, sources of electricity, voltage and current resistance, twenty electrical projects that reinforce theory lessons, learning types of circuits and how to interpret pictorial and schematic diagrams, inductance, capacitance and A.C. motors and relays. This course is prerequisite for all other modules.

APL536 Microwave Ovens and Electrical Ranges
The principles of microwave cooking, construction and operation of common microwave oven types, microwave ovens and related components to troubleshoot, peak test, and use for performance evaluations, electric ranges, emphasizing self-clean ranges, troubleshooting and diagnostic methods.

APL537 Basic Refrigeration and Refrigerators
Refrigeration theory, dehydrating the system and pressure/temperature relationships, the compression system, safe handling of refrigerant emphasizing reclaiming and recycling, safe handling and use of the prestolite torches and equipment, and brazing and soldering projects.

APL538 Freezers and Room Air Conditioners
Building, charging and testing the bench refrigeration system, compressor types and designs, and types of refrigerators and freezers, using the service manual and troubleshooting, window air conditioner installation and performance testing, and troubleshooting and repair.

APL539 Dishwashers and Clothes Dryers
The principles and operation of electric clothes dryers, diagnosing and service procedures to affect their repair, dishwasher principles and operation of various cycles, problems of washability and water, and service and repair procedures.

APL540 Clothes Washers and Compactors
Automatic clothes washers, their operation, diagnosing problems, testing and service procedures to make repairs.

ARCH101/102 Mechanical Systems
Gain an understanding of the mechanics of hearing and air conditioning systems, plumbing and electricol systems.

ARCH104 Architectural Plan Interpretation I
Build on techniques to interpret residential drawings with a view to understanding structure and alter some

ARCH120 Materials and Methods of Construction
Gain an understanding and working knowledge of building materials and their properties and use in construction.

ARCH205 Architectural Plan Interpretation II
Interpret commercial plans, specifications and building code, typical commercial plans and specifications to access information pertaining to site, sections and details, engineering plans and specifications for concrete, structural steel, electrical and mechanical details.

ARCH210 Materials and Methods of Construction III
The material processes and procedures used in the construction industry. This course supplements ARDR236. Prerequisite: ARCH120.

ARCH300A Building Science
Learn the principles of construction methods as related to OBC Part 3 buildings, and rain-screen and curtain wall details. Prerequisite: ARCH210.

ARCH301 Architectural Design I
Gain an understanding of building design issues from project conception through to design development and produce a complete design for a multi-use building and present the project to a review panel. Prerequisite: ARDR246.

ARCH302 History of Building
The history of Western architecture, from the time of the Greeks to the present day. Architectural styles and important buildings in Toronto are examined within this context.

ARCH303A Community Planning
Community planning issues such as land development and distribution systems. The focus places a land parcel scheduled for development into a perspective relative to the community in which it is situated.

ARCH311 Architectural Design II
Explore external issues which influence building design, including jurisdictional and contextual parameters and produce a complete design for a commercial building and present the project to a review panel. Prerequisite: ARCH301.

ARDR103 Architectural Rendering and Presentation I
The principles and practices of presentation drawing, including elevations, elevations and perspective; shades and shadows using delineation techniques and preliminary colour pencil and marker rendering.

ARDR114 Architectural Technician/Technalagist
The operation of MS-DOS as well as to basic application within CADD, using the latest release of AutoCAD through the use of stand alone personal computers and basic geometric construction.

ARDR120 Descriptive Geametry
Learn to visualize a three-dimensional object in multi-view based on the principles of orthographic projection, and perform mathematical calculations of the shape and size of an object viewed in space from any angle by graphic layout methods.

ARDR125 Drafting
An introduction to architectural drafting practice, dimensioning, line weighting, lettering, symbols, two point perspective, third angle and orthographic projection, and sketching.

ARDR126 Drafting
Isometric projection, sections and auxiliary views, an introduction to mechanical drafting practice and to pipe drafting practice.

ARDR128 Architectural Rendering and Presentation I
Basic presentation and rendering techniques, including perspective, shades and shadows, and pen and ink techniques.

ARDR129 Architectural Technician/Technalagist
Basic application within CADD, using the latest release of AutoCAD through the use of stand alone personal computers. Architectural projects take the simple design concept and use of system procedures to create a detailed plot drawing.

ARDR167 Architectural Drafting and Design I
The conventions of architectural drafting, including linework, lettering, architectural scales and symbols and learn to complete o set of working drawings for a single family dwelling.

ARDR177 Architectural Drafting and Design II
The development of skills required to establish effective means of graphic documentation. Given a set of design sketches, develop and prepare a complete set of working drawings for a residential project. Prerequisite: ARDR167.

ARDR203 Architectural Rendering and Presentation II
Build on presentation skills and learn interior perspective work. Prerequisite: ARDR128.

ARDR204 Computer Aided Drafting II
Computer aided drafting principles and techniques through the use of personal computers and gain the ability to use AUTOCAD for the generation of simple drawings. Prerequisite: CADD1.

ARDR204 Computer Aided Drafting III
From basic CADD skills to using AutoCAD and its more powerful features and manipulations in the creation of intermediate drawing and design projects. Prerequisite: ARDR247A.

ARDR206 Ontario Building Code, Architectural II
The implications of Ontario Building Code Part 3 regulations on building design and construction document preparation. Prerequisite: OBC100.

ARDR210 Mechanical Installations I
The basic aspects of mechanical systems in buildings.

ARDR225 Drafting
An introduction to computer-aided drafting (CAD) using autosketch and autocad vorinot to build electrical control schematics and manual drafting.

ARDR226 Drafting
Duct layouts, using A.S.H.R.A.E. symbols for heating and cooling, ventilating valves and fittings, reading mechanical and architectural plans, detailing machine rooms, duct chases and sheet metal fittings, and preparation of plans for detailed layouts of H.V.A.C. systems for medium sized commercial buildings to meet all codes.

ARDR236 Architectural Drafting and Design III
Modular co-ordination in planning, drawing, construction and building components. Create a case study involving the planning and layout of a portiol set of working drawings for a light industrial building, in conjunction with the OBC. Prerequisite: ARDR177.

ARDR246 Architectural Drafting and Design IV
Based on a partially completed set of working drowings of a complex institutional building, produce working drawings and explore interior design issues, including barrier-free design. Prerequisite: ARDR236.

ARDR301 Camputer Aided Design I
From the basic CADD skills obtained in previous courses to using AutoCAD's more powerful features and manipulations in the creation of complex drawing and design projects.

ARDR301 Codes and Specifications
Learn to interpret and understand Part 3 of the Ontario building Code and specifications using o case study.

ARDR311 Camputer Aided Design II
Build on previous CADD courses in exploring AutoCAD's more powerful features and manipulations. Gain the ability to generate complex design and drawing projects. Prerequisite: ARDR301.

ARDR312 Camputer Aided Design III
Building on previous CADD skills, learn to use AutoCAD and AutoLisp to its full capacities in the creation of final plotted drawings.

ARDR514 Drafting Blueprint Reading
The use of drafting instruments in the production of three-view drawings and isometric drawings of piping symbols.

ARDR515 Drafting Blueprint Reading
The study of frame, masonry and concrete construction regarding construction members, methods of dimensioning sections, details and architectural symbols.

ART100 Faundation Art
See SIGN546

ART201 Pictorial Art
Develop a basic level of skills in the techniques of pictorial painting as practised in the sign industry, a study of line, tonality and texture, o study of non-linear perspective, monochromatic rendering, posterization, colour blending, painting from photographs and projections and architectural rendering.

ART210 Presentation Art
Learn about scale sketches and elementory drafting techniques, lettering in perspectives, the representation of building materials, scaled perspective drawings from o plan and elevation, and descriptive text advertising objectives.

AT102 Wark Measurement I
The basics of work measurement, special aspects of work in the fashion and apparel industry, the Time Study work measurement technique, using stopwatches and other specialized equipment, industry and training videotapes and relevant plant visits.

AT105 Machinery and Equipment
Learn about the large variety of machinery and equipment encountered in the manufacture of a sewn product, alternative manufacturing methods in keeping with changes in material, styles, patterns and technological advancements.

AT111 Garment Analysis
Learn about the intricacies, methods and equipment required to manufacture a variety of apparel products and other related items, determine all of the component parts and the production methods used in the manufacturing process.

AT112 Fashian Merchandising I
The various elements of fashion merchandising, the fundamentals of fashion and basic principles that govern fashion movement and change, major fashion markets, the planning and principles necessary to have the right fashions at the right price and the importance of budgeting and control of fashion inventories.

AT113 Fashian Pramatian
The promotion of fashion on all levels, from the raw material producer and apparel manufacturer to the fashion reteiler, advertising including evaluation, image building, budgeting, media planning and creative elements, basic skills of personal selling.

AT122 Fashian Merchandising II
The planning, designing and merchandising of a fashion store to reflect its marketing personality, location, design principles, colour theory, signing, layouts, fixtures, allocation of space and visual merchandising. Create and design an original fashion store using the principles learned.

AT141 Apparel Technalagy I
Learn to develop manufacturer awareness in the construction of black modules, samples and a study of specialty techniques and using this knowledge with the pre-cut skirt and pre-cut pant.

AT142 Apparel Technalagy Pre-cuts/Samples
Learn to construct skirt and bodice blocks using proper industrial sewing techniques, with emphasis on layouts and fittings. A series of blouse and leather samples raise manufacturer awareness and help in adopting apparel details for creative design.

AT151A Wark Measurement II
The development of work standards using standard data analysis methods of apparel operations, MTM, MOST and work sampling from videotapes and related industry methods.

AT153 Apparel Technalagy II
The advanced and applied techniques of garment construction and selecting the appropriate materials and fabrics when constructing an original skirt, blouse and pants.

AT154 Apparel Technalagy
Sewing skills are further developed through an in-depth study of the construction of the pre-cut blouse. The student will select appropriate fabrications and construct a pant co-ordinate of their own design to further their creativity.

AT193 Fashian Retail Management
The operation of a fashion store on campus. Gain practical experience in the daily operations of a fashion business. The students will organize their own business and take specific management responsibilities for various departments within the business, including buying, accounting, advertising, visual merchandising and operations.

AT200 Quality Cantral
Learn the concepts of quality in apparel products, the establishment of fabric and product specifications, in-process product inspection and assessment, and finished product evaluation.

AT203 Garment Casting I
The knowledge required to develop, establish and understand the costs involved in the manufacture of a sewn product, flow charts, developing and adjusting pay rates, performance reports and excess cost reports.

AT205 Fashian Merchandise Buying
The current policies and procedures in fashion buying and merchandising, highlighting the skills buyers need to make complex decisions for successful purchasing, knowing what to buy, in what quantities, from whom and at what time, decision-making functions and techniques for more advanced merchandising.

AT221 Apparel Marketing
Modern marketing functions, procedures and techniques for the fashion industry, the development of an effective marketing strategy based on demographic, economic and competitive factors, consumer behaviour, marketing opportunities and market segmentation, selecting on appropriate marketing mix.

AT243 Apparel Technalagy IIa
The use of industrial sewing machines in the manufacturing environment. Employing industrial methods, o variety of dress samples such as gussets, zippers and plackets are constructed, followed by o pre-cut dress of classic styling.

AT246 Apparel Technalagy IIc
This tailoring course begins with samples such as the continental patch pocket, double jet pocket with a flap, notched collar and bound buttonholes. A pre-cut coat is constructed complete with interfacing and linings, and work will begin on a pre-cut jacket.

AT250A Garment Casting (Camputer Oriented)
The preparation of different types of cost sheets and the costs associated with materials, findings, labour and a variety of overheads encountered in determining the cost of a product, setting up a budget, budgetary control and cost-volume-profit analysis.

AT261 Apparel Marketing Advanced
Advanced marketing principles and concepts, developing an effective marketing mix, paying particular attention to product management, price setting, sourcing, selection of distribution channels and international marketing, case study preparation and decision making using marketing principles.

AT262 Praductian Management
Further skills from production scheduling by developing those aspects of material requirement planning needed for production and the just-in-time methods used in the fashion industry.

AT263 Apparel Technalagy IVa
Learn to convert original style ideas into a finished evening, after tea or bridal gown. Techniques such as trapunto, quilting, cording, applique, embroidery, pleating, beading, boning and lace may be incorporated into the garments.

AT264 Apparel Technalagy IVb
Complete the pre-cut jacket, utilizing industrial sewing and fusing machines and select the appropriate materials and trimmings for the career dress, cut the fabric, assemble and finish the garment.

AT265 Apparel Technalagy IVc
Create o coat ensemble or a three piece suit, along with accessories. How to purchase suitable fabric for designs, to test and select the correct interfacings, and to use industrial construction techniques.

AT266 Praduction Applications
Using computers and the necessary software, present case studies in forecasting, aggregate planning, inventory control and material requirement planning and find solutions to industry related problems. "What if" situations will be discussed and analyzed.

AT272 Management Strategy
Learn to identify appropriate business policies and opportunities useful in determining the most effective business strategies under existing market environments.

AUD150 Audit Relevant Course
An audit of fashion courses of interest to the student.

AWC100 Women, Race and Class
Gain an awareness of how the construction of gender, race and class is connected and used to maintain the subardination, oppression and exploitation of various groups within Canadian society, and in particular, women.

AWC102 Psychalagy af Women
The issues regarding the psychology of women based on personal perceptions and experience, feminist psychological theory and current research data.

AWC106 Intra to Feminism
The way in which the oppression of women is structurally maintained, the components of feminist theory, how feminists view the institutionalized oppression of women within o context of anti-oppression work.

AWC108 Introduction to Violence Against Women and Children
Become familiar with the issues and various aspects regarding specific forms of violence. Learn to provide resources and information necessary to develop an analysis and critique on the issues of violence against women and children, and examine the complexity of the issue in relation to socio-economic and political systems.

AWC109 Violence Against Women Partners: Social and Political Issues
The exploration and feminist analysis of violence against women and how violence is tolerated by society (myths and reality) and how this affects the lives of women.

AWC110/111 Group Process I/II
Gain awareness of their own interpersonal style in a group context. Develop group communication skills and use time for reflection and support for students' experiences.

AWC113 Gender Identity Development
The impact of socialization upon women throughout their lives and the many factors that interact to produce women's various identities and biologically and socially based sex differences.

AWC115 Field Wark Seminar
Meet weekly with other students and o faculty member in a small group, for discussion, problem solving and mutual support with regards to field placement.

AWC117 Child Rape: Counselling Issues
Gain a generol understanding of the social context of sexual abuse, as well as counselling issues and skills for direct service work.

AWC119 Women and the Law I
The concepts of justice and low as they affect our lives as women and the ways in which the legal system deals with violence against women and children. Develop advocacy skills to enable us to assist women who are involved with the legal system.

AWC122 Introduction to Feminist Counselling
The history, theory and value systems of feminist counselling and the sources of women's emotional distress and the meaning of women's symptoms. Students explore their own values and biases and how these may interfere with their work as feminist counsellors.

AWC123 Crass Cultural Communicatans
Learn to improve verbal and non-verbol communication skills with women and children from different cultures and develop an awareness of how various tensions within groups lead to ineffective communications.

AWC201 Graup Process and Leadership
Learn to understand group dynamics and develop the skills of effective group leadership.

AWC202 Women and the Law II
This course is o continuation of AWC119.

AWC206
See AWC117

AWC207 Feminist Counselling Skills, Theary and Practice
The role of the feminist counsellar, the dynamics of the feminist counselling relationship and how we actually integrate the philosophy of feminism into our work as counsellors. Extensive role-playing practice is used to help students learn both general and feminist counselling skills.

AWC208 Reality af Rape: Sacial and Palitical Issues
The social and political issues regarding the rape of adult women including an analysis of power and control, classism, racism, sexism, homophobia and ableism. Rape includes sexual harassment and sexual assault by o partner. Activism is a major focus of the studies.

AWC209/210 Feminist Political Actian
Learn to understand feminist political action as o tool of community development and increase students' awareness of their own potential political activism.

AWC211
See AWC201

AWC213 Reality af Rape: Counselling Issues
The understanding by individuals and groups of women around the reality of rape in our lives. The psychological, spiritual, emotional, behavioral and physical impact is developed. Advocacy and counselling skills are tought within the social/political context of the course.

AWC214 Child Witnesses to Wife Assault
An opportunity to explore a range of issues affecting children whose mothers are being assaulted in their homes. Students develop skills to deal with these issues.

AWC215 Field Work Seminar II
A continuation of AWC115.

AWC225 Field Work Seminar III
A continuation of AWC115 and AWC215.

BAR505 Bar Accounting
See ACC576

BAR506 Beverage Theory and Wines
See WIN201

BIND100 Binding and Finishing
Programmable guillatine cutters and basic cutting, the 17 1/2" x 22 1/2" and 20" x 26" Baum folders and basic folding, operation of the Bostitch 19E hand stitcher, operation of paper drill and round cornering, and basic hand binding, foil stamping and handling materials.

BIND200 Binding and Finishing
Cutting, folding and the operation of the Mueller Gathering machine and the Mueller Automatic Stitcher/Trimmer. Cortica and thesis binding, adhesive binding on the Mueller Pony 5 Rota-Binder and job planning.

BIND304 Binding and Finishing
Machine binding with programmable and computerized cutters, folding machines, the perfect binder and stitcher-trimmer, knife changes for the guillotine, slitting for 2-up work, scoring and perforating, adhesives, different feeder systems on the folders, paper and paper grain.

BIND305 Binding and Finishing
A variety of handbinding operations which incorporate design with the ability to work with the hands, the use of leather, vinyl, cotton and satin, conventional book coverings, decorating a book with brass plates and brass or silver corners, same book repairs, paper, paper grain and adhesives.

BIND542 Binding and Finishing
The operation of a small folder, paper drill, padding procedures, and the operation and programming of a computerized guillotine used for cutting paper.

BIO104 Microbiology
The physiological requirement of oral bacteria, viruses and fungi, the basic concepts of the sources and spread of infection, potential oral pathogenicity and innate body defense mechanisms.

BIO110 Biology for Fitness
The principal systems of the human body, the representative organs of each system and the function of each system, connective and skeletal tissue, neurophysiology and the structure of the circulatory and pulmonary systems.

BIO115 Human Biology I
Basic concepts of human anatomy and physiology, homeastasis terminology, body organization, body fluid compartments, fluid and electrolyte balance, transport mechanisms, acid-base balance and several of the major bodily systems, namely the integumentol, nervous and musculoskeletal systems. A discussion of homeostasis mechanisms is incorporated into each content area. Prerequisite: BIO125, PHARM102.

BIO116 Anatomy and Physiology
Goin a comprehensive understanding of the structure and function of the body systems and the interaction of these systems in maintaining homeostasis.

BIO117 Human Biology
How the structure of the human body determines the function of the parts with knowledge from chemistry, physics, and moth.

BIO11B Microbiology
An overview of the basic principles of microbiology, infectious diseases of the feet and the body's response to microbiol invasion.

BIO121 Biological Science : Human Biology
There are three areas of study. Human biology and a basic knowledge of the normal structure and function of each body system is presented. Microbiology and an understanding of the prevention of the spread of micro-organisms in relation to the individual, health care agency and community. Nutrition and the basic nutritional requirements based on Canada's Food Guide.

BIO122 Introductary Biology
A basis for the advanced study of physiology including major organ systems, physiological mechanisms of disease and treatment planning.

BIO125 Human Biology II
A study of the healthy human body, the cardiovascular, respiratory, urinary, endocrine and digestive systems, the concepts of homeastasis, fluid and electrolyte balance and acid-base balance. Prerequisite: BIO115.

BIO129 Biology: Human Anatomy and Physiology II
Gain o comprehensive understanding of the structure and functioning of the body systems and the framework necessary for an understanding of pathophysiology.

BIO202 Biomechonics I
Gain the knowledge and understanding of biomechonics necessary for the diagnosis and management of conditions with a biomechanical basis.

BIO208 Clinicol Microbiology
The general micrabiology principles to apply to specific bacterio, fungi and viruses that infect the foot.

BIO212 Biomechanics II
Develop on understanding of the various misalignments which con occur in the foot and leg.

BIO513 Biology
Specific biology including life and society, cell structure, organisms, reproduction, inheritance, the origin of living systems and laboratory experiments.

BIO523 Biology
Human biology including nutrition, cardiovascular system, gas exchange, neural control, musculoskeletal system, endocrine system and reproduction.

BIO700 Biology for Pre-Health
Human biology and physiology and how the structure of the human body determines the function of the parts.

BK101 Baking Basic
Learn the basic baking skills required to function as a cook, reading and following a recipe, and producing a finished baked product.

BK102 Baking Advanced
Produce a variety of baked products using hand tools and equipment and following standard recipes. Prerequisite: BK101.

BK203 Baking III
Continue to apply skills in the preparation of baked products and professional standards in the production of pastries and related items. Prerequisites: BK101 and 102, BKT101 and 102.

BK204 Baking IV
Learn how to produce baked products, mainly cakes and deserts, which are recognized internationally. Prerequisites: BK101 and 102, BKT101 and 102.

BK400
Traditional Italian desserts, bread and roll craft, cake making and decorating.

BK501 Baking Basic
See BK101

BK502 Baking Advanced
See BK102 Prerequisite: BKT501.

BK502A Baking Advanced
See BK102 Prerequisite: BK501.

BK550 Bakery Formulation
A discussion of bokery formula calculation of the baker's percent and preparation of formulae for different batch sizes.

BK551 Ingredients
The ingredients used in commercial baking such as shortenings, leavening agents, milk, eggs, flours, sugar and other ingredients.

BK552 Fermentation
The theory of fermented baked products including the ingredients responsible for fermentation, effects of fermentation on the final product and the control of dough temperature during fermentation.

BK553 Straight Dough
The theory of fermented breads such os Italian, French, white pan, egg type, whole wheat and Vienna bread.

BK554 Variety Fermented Goods
The theory and practical production of Danish daugh, sweet dough, yeast raised donuts and other variety goods.

BK555 Pies, Sweet Paste and Puff Paste Goods
Gain the ability to understand the ingredients and techniques to produce high quality pies, sweets, paste and puff paste goods.

BK556 Cookies
Gain a theoretical and practical understanding of the various formulae and methods of preparation of cookies for the industry, including ice box, florentines, macaroons, almond drop cookies, lady fingers, coconut squares and other products, and basic elements of decorating.

BK557 Cakes and Creams
Gain a theoretical and practical understanding of the formula methods of preparation of specialty cakes including sponge, batter type, festive and birthday cakes, European specialty cakes such as sacher, linzer, Italian, German creams such as black forest cake, mousse cakes, chilton and cheesecakes.

BK55B Muffins and Tea Biscuits
Learn the theory and preparation of quick breads, including a variety of muffins and tea biscuits.

BK560 Formulatian
More complex formulae, including calculation of these formulae in differing batch sizes.

BK561 Flaur and Sugor
Learn the history, source, production methods and use of various types of flour and sugar os used in the baking industry.

BK562 Cokes
Learn the theory and practical production of cake preparation for batter type, foam type, chiffon cakes and others.

BK563 Breods and Ralls
Learn to produce high quality bread and rolls using the correct bokery equipment for mechanical manufacturing processes of fermented products.

BK564 Pastry and Choux Poste
The theoretical and practical methods of producing o further variety of pastries and poste items.

BK565 Puddings and Desserts
Learn the production of Bovarions, mousses and other desserts.

BK566 Decorating, Specialty Work
Lhe fundamentals of decorating and how to apply these fundamentals to the decorating of selected items.

BK701 Techniques of Baking
See BK101

BK702 Pastry, Dessert and Related Theory
See BK102

BKT101 Boke Theory Basic
Gain the theoretical background necessary for the practical baking courses. The student learns about baking ingredients, what they are, and how and why they function as they do in the baking process.

BKT102 Bake Theory Advanced
The techniques used in baking, focusing on the finished product and on breods, pastries, cakes and desserts. Prerequisite: BKT101.

BKT501 Bake Theary Basic
See BKT101.

BKT502 Bake Theary Advanced
See BKT102

BKT701 Bake Theory Basic
See BKT101

BKT702 Boke Theary Advanced
See BKT102

BR105 Tools and Equipment
The selection, identification, maintenance and safe use of hand and power tools, and organizing and completing shop projects.

BR107 Moterials and Applicotions
Learn to identify materials commonly used in the renovation construction industry and complete projects designed to demonstrate their specific qualities and opplications.

BR109 Construction Safety
All aspects of safety related to renovation construction and specifically to the Construction Safety Act of Ontario.

BR111 Business Literacy and Applications
Learn basic communication skills, reading and writing assignments, technical report writing, proper methods of study, the use of computers.

BR113/115 Residential Construction Principles
All aspects of residential construction, the layout of buildings through to roof construction including interior and exterior finishes, millwork and hardware selection and installation.

BR117/119 Renovation Methods and Materials
Renvation methods employed in residential construction, from minor renovations such as o new door or window to major retrofits involving structural changes.

BR202 Commercial Construction Principles
All aspects of commercial construction, the layout of commercial buildings dealing with suspend ceilings, concrete form work and stair building.

BR206 Renavatian Methods and Moteriols II
Renovation methods employed in commercial construction, materials used in commercial renovations, floor, ceiling and wall systems, sound control, fire ratings and drywall installations.

BR210 Renovotion Business Monogement
The necessary business skills to set up and monitor a renovating business, the basics of small business management, payroll, bookkeeping, insurance, worker's compensation, O.H.I.P., business registration and licensing, computerization.

BR212 Associated Trades
Goin a basic understanding of the theory and practical aspects of the various trades involved in renovation projects and learn to assess complexity and the extent of the involvement of the plumbing, electrical and masonry trades.

BR216 Renavation Methods and Moteriols III
The practical and theoretical techniques used in finish carpentry particularly with respect to renovation projects, matching existing materials with innovative, technologically advanced products, utilizing finish carpentry techniques and new moteriols.

BR220 Environmental Impact for Renovators
Learn about the existing situation, with respect to environmetol issues, in the construction industry, energy consumption before, during and after construction, the development of an environmental plan to better manage available resources.

BR222 Renovation Business Marketing
The necassary business skills to set up and monitor a renovating business, the basics of small business management, payroll, bookkeeping, insurance, worker's compensation, O.H.I.P., business registration and licensing, computerization.

BR224 Renovation Business Marketing
Learn to develop a business plan, its importance for successful financing and organization of a renovation business, marketing techniques, customer identification, advertising, pricing and assessment of competition.

BT112A Graphic Interpretatian
Equipment, lettering linework, two dimensional drawing and three dimensional drawing, types of drawings, symbols and blueprint reading of various types of residential working drawings, with constant reference to the Ontario Building Code and current construction methods.

BT114 Introduction to Commercial/ Industrial Construction
Gain o working knowledge of preliminary job planning, work methods, materials and equipment involved in the below-grade portion of structures with cross-references to the Ontario Building Code and Act throughout, project phases, drawings, project team, site investigations, excavation and equipment.

BT11B Construction Moteriols I
Concrete and its components (cement, aggregates), factors determining strength and durability, the influence of curing and weathering, and the performance of common field tests on concrete.

BT119 Site Surveying I
Fundamentals of plane surveying with practical use and care of surveying equipment, types of surveys, horizontal and slope measurement, precision and corrections, differential levelling, angular measurement and basic principles of residential construction surveys.

BT120 Construction Moteriols II
Masonry, wood, lumber, insulation moteriols, glass, metals (steels and alloys), plastics, roofing with regard to manufacturing, physical properties, structural properties, nomenclature, classification and construction practices.

BT123 Introduction to Residentiol Construction
Residential framing techniques and residential drawing practices with constant references to Part 9 of the Ontario Building Code, conventional floor, wall, ceiling and roof framing, framing drawings and architectural drawings, quantity surveying.

BT126 Introduction to Computers
The use of DOS-based microcomputers with a commercial word processing program and a spreadsheet program, how to produce a suitably laid-out wordprocessed document and set up a simple budget and/or a simple estimating summary.

BT127 Structurel Steel I
The classification of structures with respect to moteriols and geometry, fundamentols of structural steel structures, CISC handbook of Steel Construction, drawing interpretations, and basic analysis of loads, forces, stresses and moments in accordance to CSA-S16.1-M89 and the Ontario Building Code.

BT12B Site Surveying II
Fundamentols of plane surveying and practical use of surveying equipment, distance measurement and corrections, profile and cross-section levelling, contours, gradients, quantity methods, angular measurement, fundamentals of municipal road and sewer design construction surveys and site layout surveying.

BT129 Reinforced Concrete I
Feinforced concrete structures, design and drawing techniques, loading conditions, forces and resulting stresses in concrete elements and reinforcing steel, analysis and detailing of simply supported concrete floor slabs and beams. Reference is made to Ontario Building Code, CSA-A23.3-M84 and RSIO reinforcing standards.

BUS123 Compony Organizotian - Business Regulations
The various business structure alternatives, their advantages and disadvantages, and business law as it applies to the activities of small business including contracts, torts, agency and franchising, bailment and consumer protection.

BUS124 Microcamputer Accounting Pockoge Applicotions
Hands-on experience in the use of commercial software using microcamputers in the application of financial, inventory and purchasing controls and using the microcamputer as a tool by the owner/manoger.

BUS127 Health Information Monogement - Theory I
Learn to identify the purpose and components of a health record, assemble o record, identify the numbering, storage and filing systems in use, use the patient index to locate specific records, identify methods of record control, identify legal and accreditation standards for health records and conduct a quantitative analysis of o record according to specified format.

BUS133 Microcomputers in Business
An introduction to Lotus 1-2-3 through a series of laboratory activities and assignments and group projects pertaining to a variety of specific business disciplines. Prerequisite: BS113.

BUS139 Medical Office Procedures I
The qualifications and responsibilities of a medical office administrator, a brief history of the medical profession, the role of the holistic approach to medicine, administrative systems management, medical scheduling systems and the importance of time management.

BUS140 Spreadsheet Applications
Learn to access spreadsheet software (Lotus 1-2-3) and to perform the functions required to create and enhance a worksheet, create and print graphs, use and manage large worksheets, create and use databases, and create and use macros.

BUS143 Machine Transcription
The skills required to operate on electronic transcription unit, develop and refine proofreading and grammar skills, use proofreaders' marks to indicate corrections and produce mailable documents by transcribing from prerecorded tape.

BUS144 Medical Terminology I
Learn to recognize and explain the meaning of medical terminology as it occurs in the medical environment, whether written or spoken and gain a knowledge of the formation of medical terms and the shape, structure and function of the human body and its parts.

BUS152 Industry Overview
Through lectures delivered by members of brokerage firms, gain an overview of industry operations, corporate finance (mergers, acquisitions), trading (bonds, money market), rules and regulations of the industry, retail sales, mutual funds and R.R.S.P.s.

BUS153 Financial Management and Analysis I
Learn about financial statements with emphasis on financial analysis of the balance sheet, the income statement and combined market ratios, financial concepts in the areas of securities availability and valuation, investing, inflation, value of money and financial markets.

BUS156 Foculty-Directed Canadian Securities Study Course
Develop the self-discipline and motivation required to work towards the completion of the Canadian Securities Course. With the guidance of a faculty advisor, work on assignments as required for submission to the Canadian Securities Commission.

BUS157 Financial Monagement and Analysis II
Learn to understand short-term financing sources, dividend policy and retained earnings, issuing securities, earnings, long-term financing sources, preferred and common shares, convertible securities and warrants and international finance.

BUS15B Business Law
Gain on overview of the Canadian legal system, the law of contracts, particularly in relation to such investment areas as joint accounts and margin agreements, the various devices used to secure debt and problems of the insolvent debtor.

BUS159 Business Laboratory I
Learn about fashion merchandising, providing a real world exposure to the many challenges faced in the merchandising field. The fashion store's weekly results in sales, inventory, profit, turnover, markdowns, and opening will be analyzed and discussed. The student will build a portfolio and present research assignments.

BUS174 Foculty-directed Canadian Securities Study Course
The student, with the guidance of a faculty advisor, will complete the assignments as required for submission to the Canadian Securities Commission in preparation for writing the Canadian Securities examination.

BUS1B5 Managing Your Job and Yourself
Learn how to plan a daily routine incorporating time management tools and techniques, how to manage the broker's time, how to monitor and evaluate the results of a specific decision, organize the work station for efficient job performances and control concurrent tasks.

BUS1BB Document Preparatian
The skills required to check facts, spell correctly and prepare complete and correct final copies of all types of documents used in a business office.

BUS191 Procedural Analysis
Learn the tan basic functions of business and how those functions interrelate, analyze and track problems in a system, provide a flowchart for information flow between functions, the information flow in a paper-based and paperless office.

BUS200 Business Laboratory II
This course continues the real world of merchandising with the operation of College Creations, with exposure to more advanced principles intended to fine tune the student's understanding of the merchandise field, sourcing and market research.

BUS235 Health Record Administration - Theory III
Learn to identify the benefits and problems of the Canadian health care system, the role accreditation ploys in setting standards and the components of a quality assurance program.

BUS237 Retail Strategies
Gain an understanding of the components that make up a successful retail establishment including customer focus, site selection, store design, dealing with suppliers, pricing for profit and managing.

BUS238 Business Case Studies
Learn to work in a team to solve and analyze business cases and defend solutions with appropriate techniques and skills.

BUS239 Effective Selling
Gain a basic understanding of the sales function, successful selling techniques and how customers decide what, when and where to buy.

BUS240 Using the Personal and Business Computer
The use of microcomputers and appropriate software to deal with a variety of business functions, understanding computer files, databases, database management systems, and controls and system studies for effective accounting information systems.

BUS242 Behavioural Science in Business
An introduction to human relations including the historical roots of human relations, the language of communication, creativity, the decision-making process, leadership and employee-union relationships.

BUS248 Health Record Administration - Lab III
A directed clinical practice in the health record department of a health care facility to gain practical experience..

BUS270 Medical Terminology II
The formation of medical terms, including suffixes, prefixes and combining forms, abbreviations, surgical terms and diagnostic terms relating to body systems.

BUS271 Computer-Aided Transcription II
Learn to utilize computer assistance producing accurate, timely transcripts and clean, conflict-free shorthand notes.

BUS273 Medical Office Practice III
Learn to complete travel arrongements, prepare itineraries and agendas, arrange meetings, produce minutes, complete various medical accounts and various related forms and complete other financial procedures such as payroll and listing cash disbursements.

BUS274 Medical Terminology III
The continued development of medical terminology.

BUS277 Court Procedures - District Court
Learn the function of the provincial court system, the placement of the court officers, the setting up of official court transcripts and the terminology and jargon surrounding court work.

BUS281 Advanced Camputer Tapics
Learn to better understand computer functions by developing programming skills in BASIC, using DOS and database management software (dBASE III Plus) to store, update and retrieve data and to produce reports and mailing labels.

BUS283 Entrepreneurship Within The Large Carporation
Learn to bridge the gap between small business management (entrepreneurship) to intrapreneur within a large business or corporation (intrapreneurship) and how to utilize the skills learned in the small business program and apply them within the larger business.

BUS284 International Trade
Learn about import and export procedures, how they are applied to small businesses, international marketing, sourcing foreign suppliers, local market research, import/export documentation, researching export markets and transportation.

BUS320 Organizational Behaviour - Theory
Gain a knowledge of organizational behaviour including decision making, conflict and conflict resolution, behavioural techniques, motivators, ethical awareness, and equity considerations and implications.

BUS321 Financial Management
The goals and functions of financial management within the Canadian business environment, techniques of financial analysis, forecasting, leverage, working capital management, short-term financing and international financial management. Prerequisite: ACC177 or ACC102.

BUS324 Canadian Business Policy and Strategy
Policy formation and strategic planning, its relationship to the business organization, the Canadian business environment with respect to legal, political, economic and social constraints, social responsibility and business ethics.

BUS326 Faculty Directed Research I
Develop the self-discipline required to work without close supervision by carrying out as an out-of-class assignment, using the faculty member as a guide and resource person. Most students work as consultants to small companies, using the fall semester to gather background data. Prerequisites: ACC200, 204, 205, and 222.

BUS327 Faculty Directed Research II
The practical applications for the dBase III+ software programme as applied to the management and manipulation of large amounts of data, the case study method of problem-solving, researching business-related problems with owners and managers of small business. Prerequisite: BUS326.

BUS334 Managing Organizational Behaviour
Using case studies and classroom simulations, learn to analyze, strategize and direct situations within organizations using motivational, change, communication and leadership skills. Prerequisite: BUS320.

CAD203 Computer-Aided Design I
Use modular projects to learn the AutoCAD application, basic 2D principles, block and file management.

CAD213 Computer-Aided Design II
Further advanced features of the AutoCAD product.

CAD231 Computer-Aided Drafting
Learn computer-aided drafting using AutoCAD, to create a drawing, edit, erase, redraw and restore, magnifying, reducing, plotting, creating circles, arcs, ellipses and tangents, and create title blocks.

CAD301 AutoCad II
Use basic CADD skills to learn Autocad and its more powerful features and manipulations in the creation of intermediate drawing and design projects. Prerequisites: CAD231.

CAD302 AutoCad II
Layering, library creation, advanced dimensioning, isometric creation, hatching and sketching, basic 3D modelling. Prerequisites: CAD231

CAD364 Computer-Aided Drafting II
The drawing of a subdivision, transposition and translation of items within the drawing.

CADD1 Camputer Aided Drafting I
Develop familiority with DOS and basic AutoCAD skills.

CAM100 Photomechanical Repraduction
Basic course for black and white camera covering the operation of process cameras, calibration of process cameras and darkroom equipment for line, fine line and halftone negatives, application of filters and panchromatic film and making photographic contacts and duplicates, film processing machines, theory of photographic lenses, light sources, film emulsions and processing chemicals, separations for process colour.

CAM101 Photomechanical Repraduction I
A basic course for black and white camera covering the operation and calibration of process cameras, application of filters and panchromatic film and making photographic contacts and duplicates, theory of photographic lenses, light sources, film emulsion and processing chemicals.

CAM103 Photomechanical Repraduction II
An advanced course in halftone photography using lith and rapid access film and processors, the operation, maintenance and control of film processors, the use of reflection, transmission and per cent dot densitometers, the use of exposure computers and an introduction to colour separation procedures.

CAM105 Colour Separatian - Scanner I
Extensive line and halftone process photography, colour theory as it applies to process color printing, color scanner principles and operation, proofing, evaluation of colour and future trends, tone reproduction, colour correction, detail enhancement and undercolour removal.

CAM114 Introduction to Electranic Image Assembly (Mac)
Mac basics include system components, image quality, file organization and hierarchies, file creation/storage/retrieval and the use of graphics software. QuarkXPress provides wide creative latitude in editing text, handling files, style menus, picture boxes and colour use.

CAM116 Colour Separatian - Scanner I
Extensive line and halftone process photography, colour theory as it applies to process color printing, colour scanner principles and operation, proofing, evaluation of colour and future trends, tone reproduction, colour correction, detail enhancement and undercolour removal.

CAM200 Phatamechanical Reproduction
Advanced course in halftone photography using lith and rapid access film and processors and including the operation, maintenance and control of film processors and use of reflection, transmission and percent dot densitometers, calibration of various types of contact screens to camera and processing conditions, making duotones and other special effects, the use of exposure computers, set-up of automatic/computerized camera controls and colour separation procedures using a colour scanner.

CAM300 Phatamechanical Reproduction - Tone Reproduction
The study of tone reproduction for printing processes, manipulation of tones, characteristics of the press, paper, plate, film, processing conditions and the copy to achieve optimum reproduction on the printed sheet, the use of process cameras, enlarger, contacting and other equipment, densitometers and film processing machines.

CAM335 Phatamechanical Reproduction - Calaur Scanner and Flatbed Caulor Repra
The study of process colour reproduction for the printing processes, manipulation of tones, conventional colour reproduction, new technology of desktop reproduction using flatbed scanners and popular software such as Adobe Photoshop, using the equipment to produce assignments.

CAM519 Electranic Image Assembly - Calaur
Learn the Macintosh platform using QuarkXPress and graphics software (Adobe Illustrator, Photoshop) to import documents and integrate colour images for colour page make-up and proofing output to laser image setters.

CAM534 Pracess Camera Operatian
The operation of the process camera, horizontal and vertical, manual and computerized, theory of film emulsions, light sources, processing solutions and photographic lenses.

CAM547 Phatamechanical Reproduction
Basic black and white process cameras, the operation of various types of graphic arts cameras and related darkroom equipment for line negatives, halftone negatives and duotones, the use of contact screens, film processors and colour scanners.

CAR500 History, Regulatians, Health and Safety
Learn trade history and current regulations and develop a working knowledge of safe use of equipment, safety procedures, rigging and emergency first aid.

CAR501 Materials and Supplies
A study of materials commonly used in construction by carpenters, both synthetic and natural materials including plastic laminates and common woods, rough and finished hardware and adhesives.

CAR502 Plans, Specifications and Cades
A study of fundamental drawing techniques, including symbols, dimensioning, and line types, develop a series of instrument drawings, interprete and understand the Ontario Building Code.

CAR503 Estimating, Calculatians and Layaut I (Basic)
Fundamental laws and methodology of basic construction layout and geometry, calculations of whole and decimal numbers, fractions, decimal conversions, decimal feet, metric system, calculator use, roots and exponents, Pythagorean Theorem, perimeter, area and volume, and percentages.

CAR504 Hand and Power Tools
Learn proper selection and use of hand and power tools in a series of woodworking projects.

CAR518 Plans, Specifications and Codes II
Learn to interpret and draw fundamental residential blueprints.

CAR519 Intermediate ECL II
The application of basic geometry methods with respect to roof developments, estimating quantities of materials from plans in order to develop the ability to itemize materials, unit costs and total costs for a simple job.

CAR520 Residential Canstructian
The development of residential house construction techniques from the ground up, with constant reference to the Ontario Building Code.

CAR533 Commercial Canstructian
The development of commercial construction techniques according to the Ontario Building Code.

CAR534 Advanced ECL III
A further development of technical descriptive geometry to solve related problems in the construction industry.

CAR535 Commercial Canstructian
The development of commercial construction techniques from concrete forms to acoustic ceilings.

CARE900 Communicatians
Gain a better understanding of the cultural patterns and social values of the institutional population, verbal and nanverbal communication, and the effective use of English.

CARE901 Biological Needs
Learn normal body processes and physical changes which occur during the life cycle, and the nutritional needs to maintain health with special reference to the needs of the elderly.

CARE903 Social and Ematianal Needs
The basic social and emotional needs of individuals as a background to understanding the emotional and psychological changes which occur with aging and institutionalization.

CARE908 Persanal Care
Learn the basic principles of persanal care with emphasis on the needs of residents and the application of these skills in a variety af institutional facilities.

CARE909 Activatian and Ambulatian
Learn methods of remativation and how to minimize the disabling effects of aging and chranic disease and how to apply these skills in a variety of situations.

CARE910 Field Practice
Students will develop job competencies in an institutional setting. Students who can document competency through employment status are eligible to apply for exemption from this course.

CC500 Support Graup
Twenty unemployed workers age 45+ meet daily in a workshop. With a career counsellor as facilitator, they examine and discuss the effects of unemployment, conduct self-assessment exercises, examine skills and accomplishments and put career opportunities into perspective. The group provides an opportunity, through sharing and group problem-solving, for participants to gain confidence while working through their own mid-life career issues.

CC501 Vacatianal Explaratian
Each of the 20 participants benefits from vacational assessment which includes examining interests, aptitudes and personality. Blended with this approach is instruction in conducting vital career research using career resource centres and career librar-ies in the city. The focus is on available career and life-style options using a variety of proven and creative techniques.

CC502 Jab Search Techniques
Each of the 20 participants becomes involved in preparation for re-employment, which includes consideration of a career change. A priority is refining and improving the tools necessary to successfully market oneself: preparation of resumés and supporting written material, and conducting employment and information interviews.

CC503 Community Resources
To prepare for re-employment or plan for retirement, requires an awareness of opportunities. Students focus on life skills, how to handle employment and leisure time through exploration of personal values, community, cultural, educational and recreational resources. A one-day outing is planned by the group.

CCN400 Critical Care Nursing Theory and Lab General
The core nursing theory and skills essential for the registered nurse caring for a critically ill patient practised in classes and clinical settings.

CCN401 Critical Care – Pathatherapeutics
The core concepts of biodynamics, stress, adaptation, deviations in relation to the vital systems.

CCN402 Critical Care Nursing - Practical - General
The clinical application of theory and skill obtained in critical care nursing.

CCN403 Critical Care Nursing - Theary - Advanced
Gain the knowledge and skills necessary to care for the unstable critically ill patient with multi-system problems in a sophisticated critical care setting.

CCN404 Critical Care Nursing - Practical - Advanced
The clinical application of theory and skill already obtained.

CD100 Life Skills I
Life Skills stresses interpersonal communications and promotes the development of a well rounded person. Goal setting, assertiveness, coping with stress, sexuality, interpersonal relations and dealing with anger are discussed in small group sessions with a certified life skills coach.

CD101 Life Skills II
Basic life skills topics and topics raised by the students.

CD102 Communicatians Skills I
Learn how to implement a job search program, information interviewing, application forms, letters of application, resumés and employment interviews, and computer software.

CD103 Communicatians Skills II
Be successful in the workplace using verbal and non-verbal communication, following instructions and getting along with co-workers.

CD104/105 Mathematics Skills I/II
Basic arithmetic operations, solving simple mathematical problems, budgets and banking with a consumer orientation.

CD106/107 Fitness I/II
Learn to promote regular exercise, better eating habits and good personal hygiene, and participate in a number of indoor and outdoor sports activities.

CD108 Vacatianal Skills/Assessment I
Use individual interests and abilities to identify a realistic career plan through extensive vocational assessment and testing and job shadowing.

CD109 Vacatianal Skills/Wark Placement II
Learn how to complete a realistic career plan, workplace safety and legislation with at least one work placement relevant to the student's career plan.

CD112 Overview: Career and Wark Counselling
Provides an orientation to career and work counselling and related issues with exercises on personality, learning style and interests, and changes in the world of wark.

CD113 Wark and Life: A Career Counselling Perspective
The various definitions of work, as determined by historical, sociological, economic and cultural factors, the workplace of the future and the impact on the role of the career and work counsellor.

CD114 Individual Career Counselling – Skills and Process I
Through the practice of counselling skills and process in experimental sessions, learn to conduct initial interviews with clients focussing on relationship building, needs identification, reaching agreement of needs and developing counselling goals and a plan of action.

CD114 Assessment in Career Counselling: Tests, Interpretatian and Placement
Examine a variety of interest tests, personality indicators, abilities instruments and values inventories first-hand and then utilize selected tests/inventories in a career counselling context.

CD115 Stages af Adult Development: A Career Counselling Perspective
Themes of adult development in diverse populations, factors, similarities and difficulties affecting life long development, theories of adult development and the latest journals.

CD116 Career Development Theary I
Learn the theoretical underpinnings at the career development field and apply theory to case studies and to individuals being interviewed.

CD117 Practicum Preparatian
Through visits to practicum sites and class presentations, gain wider exposure to the field and make decisions for practicum placement, and use resumés and learning contracts to identify learning goals.

CD118 Assessment in Career Counselling: Statistics and Tests
Learn to understand basic statistics in relation to vocational tests and the purpose, principles and correct practices of administering aptitude interest and personality tests.

CD119 Career Development Theary II
The theary related to cultural and organizational context of careers, mid-career choice, mentoring, learning organizations and breaking career routines.

CD120 Individual Career Counselling Skills and Process II
The appartunity to practice and learn the skills and processes used in dealing with client resistance or reluctance, decision making strategy, learning strategy to acquire new behaviours and self-management strategy.

CD121 Resources in the Field (Career Information Systems)
Gain a working knowledge of career information resources, accessibility issues and client utilization strategies.

CD122 Career and Wark Counselling with Diverse Populations
Through an experimental approach students examine their own ethnic, cultural, racial and linguistic background, and learn current approaches and techniques that are sensitive to the cultural backgrounds, values, attitudes and life experiences of their clients.

CD210 Graup Career Counselling
Gain an understanding of group development and group dynamics theary and knowledge of application of group process, learn communication skills and techniques which foster group development and integrate vocational counselling concepts and material into the group counselling process.

CD211 Theary and Practice af Jab Search
Learn job search strategies in detail including resumé preparation, interview preparation, networking and informational interviews.

CD212 Career and Wark Equity Issues
Learn about employment equity, pay equity and human rights codes, and the impact of legislation on organizations and individuals.

CD213 Managing Change and Transitian
Gain increased awareness, knowledge and appreciation of the complexity of change and transition personally, within organizations, family and society in general.

Special Topics
Learn creative counselling techniques, marketing and consultation skills in a workshop format.

CD218 Theary and Practice af Jab Search with Special Needs Papulatians
Learn to apply skills and activities to clients having special needs.

CER107 Ceramic Technalagy
The origins and used of clay and related minerals, developing clay bodies and glaze composition, developing clay bodies for cone 10 and mineral fusion tests, and loading and firing kilns.

CER122 Mauld Making
Plaster ratios and mixing, piaster casting, model forming for drain moulds and two piece moulds., positive and negative forms and moulds in flatware.

CER123 Hand Building
Hard slab construction cubes, designing cutouts and negative and positive space, cups and handles using hard slab, soft slab, extrusion forming, slips, sprigs and sgraffito techniques, coil pot forming and mattboard technique with previous jars.

CER157 Clay and Glaze Technalagy
Line blends, utectic quadraxial blends of glaze forming and controlling materials, ultimate percentage analysis of materials and glaze calculation, theary and practice on transparent cone 10 glazes and colour and opacified triaxial tests.

CER171 Thrawing
Farming bowls, spherical shapes, stacking bowls and free form bowls, foot shapes and proportions, decoration including brushwork, painting, oxides and slips, historical models and contemporary design, balance, tension, ten plates, repetitive farming, tea pots, lid types, handles, style and function.

CER172 Mauld Making and Slip Casting
Modelling, faring and carving piaster, exploration of planes/forms and shapes, three and five piece moulds, files, flat and sculptural architectural frieze project and master block making for production.

CER173 Hand Building
Bowls and platters, press moulds/bisque clay and plaster, coloured clays, inlays and slips, tiles and hand formed tea pots and earthenware terra sigillata.

CER205 Ceramic Technology
The development of low temperature clay bodies and glazes cone 06 to cone 6 range, casting slips, colour in clay, kiln maintenance, theory and practice and scheduled firing of kilns.

CER221 Ceramic Techniques
Throwing and hand building, sets, pouring vessels and serving containers, architectural wall project or space divider, site specific with choice of materials/technique and firing process.

CER222 Mould Making
Designing a coffee or tea service, pratatype development, lofting and model making and multi-piece moulding and casting.

CER223
See CER221

CER257 Ceramic Technology
Developing mat and satin glazes for cone 10 by percentage analysis, coloured and textured glazes and kiln construction theory.

CER271 Ceramic Techniques
Dinner service/cooking vessels, plates, multiple forms and shopline protect form evolution.

CER272 Mould Making
Multi-piece moulding, animal figure forms and sculptural forms.

CER273
See CER271

CHEM513 Chemistry
The basic concepts of matter, structure of the atom, structure of compounds and chemical equations.

CHEM523 Chemistry
Gases, solutions and colloids, acids and bases, chemical equilibria and organic chemistry.

CHEM700 Chemistry for Pre-Health
The chemistry necessary to understand how the human body works, especially as it relates to biology.

CHI109 Interviewing and Counselling I
Gain a fundamental understanding of and competence in the skills of 'attending' or listening to another person which are basic to empathy, the ability to experience and understand the world of another human being. Emphasis will be placed on stressing the growth potential which is in every helper, client, and person with whom we work.

CHI110 Health and Nutrition
The relationship of and need for good nutritional and health care to the emotionally/behaviourally disturbed child or adolescent in order to assess an holistic approach to treatment.

CHI102 Integrative Seminar
The opportunity to share experiences in field placement and issues pertaining to course work with a small, supportive peer group. Discussion of individual and common issues enables the student to understand how theory learned in the classroom relates to work with clients in the field placement.

CHI111 Intro to Psychology
The major topics and ideas in general psychology and their relevance to child and youth care, how the brain works, why people dream, cognition and thinking, motivation, and the nature of learning and behaviour modification.

CHI112 Human Growth and Development
Goan the knowledge of basic developmental patterns in children to recognize both normal and abnormal behaviour, physical, emotional and cognitive growth, the theories of Erik Erikson and Jean Piaget.

CHI113 Therapeutic Activities
Learn how to plan, lead and evaluate goal-directed activities focusing on the promotion of the mental health of children through activities which develop their self-esteem, coping and social skills, and how to lead activities in the field placement..

CHI115 Group Dynamics
The importance and power of groups, communication and leadership styles, what constitutes a successful or non-successful group, trust building, phases of group development and constructive and non-constructive roles.

CHI118 Sociology
Socialization, culture, ethnic and race relations, what is considered deviant, how societies attempt to control it, ethnicity, family traditions and spoken and unspoken expectations.

CHI119 Child and Youth Care Methods I
Learn why children behave as they do in particular situations and specific therapeutic interventions for interacting therapeutically with children in their everyday life situations as vehicles to increase children's self esteem and social skills.

CHI121 Field Practice I
Learn to work therapeutically with groups of children in supervised educational settings and gain experiences to add to the information and knowledge previously obtained.

CHI122 Introduction to Child and Youth Care
Learn the essential skills, responsibilities and duties of the child and youth worker.

CHI214 Field Practice II
Work in supervised residential settings including facilities for young offenders, residential treatment centres, children's mental health centres and youth hostel programs. Students are required to work a variety of shifts and some weekends.

CHI200 Family Process
Learn the developmental stages that a family experiences during its lifetime. A systemic approach will be used as a framework to explore the stages of the family life cycle.

CHI206 Human Sexuality
Gain an understanding of relevant information/research relating to human sexuality, the ability to discuss, with greater ease, issues related to human sexuality, an awareness of the diversity of viewpoints and values in the area of sexuality while respecting the opinions and rights of others and an ease in discussing issues relating to sexuality with clients.

CHI207 Working with Families
The responsibilities and purpose of family life and explores aspects of dysfunction within a family system, understanding the origins of dysfunctions and the need for intervention to promote healthy family development, the possibilities and options relating to family relationships along with the stresses most families will encounter.

CHI209 Interviewing and Counselling II
Students learn a number of philosophical approaches to counselling and explore their own individual approaches to counselling.

CHI212 Child and Youth Care Methods II
Learn to understand one's own behaviour in interacting with clients as well as understanding the client's behaviour, develop the ability to articulate, demonstrate and document a clear and rational treatment perspective.

CHI213 Integrative Seminar
See CHI102

CHI215 Assessment and Plans of Care
Learn the assessment and recording processes used in the field, why agencies ask that records be kept and how the information in those records is created, monitored, and updated, the ways the record keeping and goal setting may vary in different settings.

CHI230 Programming for Adolescents
Examine the adolescent's search for identity and develop an understanding of the needs and wants of this population learn to work with adolescents by examining their needs, explore and develop programs for adolescents which promote healthy functioning and community involvement and work with adolescents who are preparing for independent living.

CHI300 Values, Ethics & Professionalism
Learn to examine the complex and often conflictual issues present in the field of mental health, study existing codes of behaviour and explore ethical and professional positions as they relate to their chosen field.

CHI305 Integrative Seminar
See CHI102

CHI306 Field Practice III
This third field placement will meet any residual goals that a student may have identified. It may be completed in a supervised day treatment setting, an educational setting or a residential setting, and will allow the student to become employable with all the requisite skills for an entry level child and youth care worker.

CHI312 Exceptional Children
Learn the characteristics of exceptional children and their education with a focus on the field of special education, gain a fuller awareness of exceptionalities to enable them to provide more effective services to their clients, resulting from developmental variances, genetic or birth trauma disorders and/or environmental deficits. The emphasis will be on dealing with all children in a humane and caring manner.

CHI319 Legislation and Social Issues
Become familiar with the Child and Family Services Act (1984) and the relevant sections of the Education Act, the impact of the pertinent pieces of legislation, how to work within the legal framework to continue advocating children's and adolescents' needs and rights, how to confront a social issue in depth and to determine what is being done to address it.

CHI321 Psychopathology
Learn to identify behavioural, emotional or thought problems serious enough to cause a young person distress and/or impinge on their ability to function as expected and how to understand, manage and predict behaviours stemming from psychiatric problems that clients display.

CHIR107 Chiropodial Therapeutics I
The theoretical background necessary for practical experience, including various methods of sterilization, chiropodial materials, foot examination and pharmaceuticals used for treatment.

CHIR110 Emergency Care
Gain the knowledge and skills necessary to effectively respond to the various emergency situations in chiropody.

CHIR115 Chiropodial Therapeutics II
The treatment of the conditions affecting the superficial tissues and nails.

CHIR215 Physical Therapy
Learn the various physical therapy techniques used in chiropodial practice, the physics, indications, contraindications and method of application.

CHIR305 Research Methods
Gain an understanding and appreciation of the role of research in the health sciences, specifically chiropody.

CIV221 Municipal Services II
The rational method of storm and sanitary sewer design, water distribution system, subdivision design, methods of construction, engineering design records, the design profile, engineering construction drawing and specifications, intergovernmental relations, responsibilities and regulations.

CIV222 Highway Technology I
Learn about soil types, visual and tactile identification, routine laboratory tests for identification and control of materials, placement and compaction of imported materials, excavation and construction procedures as related to in-situ conditions, asphaltic materials and definitions of flexible and rigid pavement.

CIV230 Reinforced Concrete Design II
The basic design and drawing of columns and foundations in accordance with Ontario Building Code, CSA-A23.3-M84 and the limit state design theory, general requirements and specifications, reinforcement details, introduction to engineering and placing drawings and bar lists, and a columns and foundations project.

CIV231 Municipal Services I
Fundamentals of hydrology, precipitation, infiltration, run-off, ground water, methods of calculating run-off, open channel flow and channel types, urban systems, the road system hierarchy, storm systems, sanitary systems and watermain networks.

CIV232 Highway Technology I
Highway classification, traffic characteristics, highway location, geometric design factors, highway capacity and level of service, design of horizontal and vertical alignment, and cross-section elements.

CIV233 Plane Surveying I
Basic surveying techniques applied to topographical surveys and highway construction surveying, geodetic surveying, trigonometry, levelling, loop levelling and adjustments, instrument testing, traversing and adjustments, latitudes and departures, triangulation, tachometry, route locations, and fundamentals of highway construction and layout surveying.

CIV241 Structural Steel Design II
Design and detailing in accordance with CSA-S16.1-M89 , limit state design methods and CISC standards for beams, columns and connections, engineering, erection and fabrication drawings of floors, column schedules and elevations.

CIV243 Plane Surveying IV
Advanced surveying techniques pertaining to control surveying and engineering construction surveying methods, electronic measurement, 2 peg and 3 wire levelling, land acquisition surveying, parallel and irregular offsetting al line, and rectangular co-ordinate grid systems.

CIV245 Quantity Surveying and Estimating
Quantity surveying and estimating, the role of the quantity surveyor/estimator, tendering, methods of measurement, division 02, excavation, division 03, concrete, division 05, metals.

CIV303A Highway Technology III
Design and drawing of a flexible and rigid pavement structure following established methods, asphalt technology, sources and properties of materials, aggregates, mix design, production and quality control, test procedures, geotextiles, drainage and stabilization.

CIV310 Reinforced Concrete Design III
Basic design and drawing in accordance with the Ontario Building Code and CSA-A23.3-M84, based on the limit state design of retaining walls, basement walls and shear walls, continuous and two-way slabs using a handheld calculator and camputer solutions.

CIV312 Municipol Engineering Planning
The municipol planning process as extended from the design of municipol servicing systems to the design of communities, population projections, land use classifications, the Planning Act, the official Plan, zoning regulations, existing features and site analysis, population densities and distribution, neighbourhoods and components, and the community plan.

CIV314 Soil Mechonics and Foundations I
Subsurface explorations, purpose, planning, common types of boring, sampling, testing ground water measurement, engineering properties of soils (cohesive and non-cohesive materials), engineering properties of rocks and ground water and associate phenamena.

CIV321 Structurol Steel Design III
The design and drawing of low-rise structures in accordance with CSA-S16.1-M89, limit state design, CISC Standards, Ontario Building Code and National Building Code specifications, structural and snow loads, wind and earthquake forces, vertical and horizontal bracing, fabrication drawings and bill of materials.

CIV323 Transportation Plonning
A study of the various modes of transportation available within the urban complex, systems, modes, capacity and control are examined with experts in their field. Agencies studied include; Metro Toronto Department of Roads and Traffic, Ontario Ministry of Transportation, Toronto Transit Commission and Pearson International Airport.

CIV324 Soil Mechonics and Foundations II
Shear strength theories, Mohr-Coulomb theory, bearing capacity of shallow foundations, earth pressure, retaining walls, open cut excavations, deep foundations, design and capacity, sheet piping, cofferdam safety.

CIV325 Construction Management III
Estimating costs of construction and rental equipment, analysis of prices and comparative method of pricing, specification interpretation, procedures for preparing construction contracts, documents and drawings comprising contracts, building and negotiating contracts, construction law, construction cost accounting, inspection tests, quality control, construction safety, records and reports, project close-out, claims and disputes.

CIV354 Sonitary Technology
Sources of water supply, surface, groundwater, reliability of source of supply, classification of reservoirs, site selections, site preparation, watershed control, dams, water supply, forecasting population, planning and zoning, water treatment, sewage treatment, activated sludge, extended aeration, waste stabilization pond and tertiary treatment.

CIV363 Mothematics (Calculus)
This introduction to statistics looks at probability, central tendency and graphing data.

CLIN114 Clinicol Skills I
Gain the necessary manoul skills to function effectively in the clinical environment, antiseptic precautions, nail care and scalpel technique.

CLIN115 Clinicol Skills II
This 152-hour course develops the clinical skills.

CLIN205 Clinicol Skills III
This 135-hour course develops clinical skills.

CLIN215 Clinicol Skills IV
This 300-hour course develops clinical skills.

CLIN305 Clinicol Skills V
This 180-hour practical course is an extension of the Clinical Skills IV course.

CLIN316 Clinicol Skills VI
In addition to clinical training at Toronto General Hospital, experience field placement in clinical settings throughout Metropolitan Toronto and/or the province, working in co-operation with established chiropodists.

CMPU598 Computer Literacy
The basics of IBM-PC computing, features of the IBM-PC, computer terminology, keyboarding, MS-DOS, word processing (WordPerfect), and the use of instructional software (Typing Tutor, B.A.S.E. (Basic Academic Skills For Employment).

CO231 Building Construction II
Load bearing masonry, curtain walls, roof systems, floor systems, timber framing, structural steel, exterior finishes and reinforced concrete.

CO232 Contracts and Specificotians
Construction contracts on entering into a construction contract, general conditions and construction specifications generally.

CO233 Building Construction I
Deep foundations, piles, caissons, explosives, formwork and hoisting equipment.

CO234A Quontity Surveying I
An introduction to quantity take-off, Canadian Institute of Quantity Surveyors format, blueprint reading, masterformat, divisions, outline specifications, simple sub-structure, and wood frame superstructure take-off, application of quantities to Lotus 1-2-3 or other electronic spreadsheet.

CO235A Mechanical Installations
Water and sewage disposal, storm drainage, pipe sizing, traps, fall, piping materials, couplings, joints, water pressure, plumbing layout, principles of heating and air conditioning, calculations for humidity, relative humidity, ductwork dampers, diffusers and pollution control equipment.

CO240A Quantity Surveying II
Quantities, soils, grading superstructures, masonry, and steel, advanced blueprint reading, bills of quantities and an introduction to pricing.

CO243 Electrical Installations
Electrical equipment, principles of lighting, types of fixtures and wiring, transformers, flood lighting, under-floor duct and distribution systems, interpretation of electrical drawings of simple circuitry and lighting layouts.

CO306 Building Economics
Estimates from concept to completion, principles of cost control, determining budget costs from sketch drawings, cost comparisons of various shapes, sizes and building heights, different materials, comparisons of life cycle costs with the initial costs, sources of cost information and price indices, and market analysis.

CO309 Construction Low I
Gain a basic understanding of legal principles and practices related to construction, the Canadian legal system, laws of Contract, construction contracts and bonds, and standard industry documents. Prerequisite: CO309.

CO310 Construction Methods I
The physical characteristics of soils, classification, hydraulic properties, dewatering, embankment construction and control, and excavations and supports, site planning and preparation, ground improvement and earth structures, controlled fill and surcharge techniques.

CO311 Quantity Surveying and Estimating I
Advanced quantity take-off with computer application, introduction to pricing unit costs, detailed estimating masterformat divisions, total building take-off (architectural), introduction to labour pricing, including productivity constants, first principles and estimate summary sheets, preparation of tender submission.

CO312 Construction Management I
Management, owner, contractor, and designer relationships, planning,contractors' and job organization charts, scheduling, critical path method, control, progress evaluation and management reporting and land development,analysis of industry from land acquisition through issuance of building permits, codes, bylaws and planning acts.

CO319 Construction Low II
The legal issues related to construction, the Construction Lien Act. Standard Project Close-out procedures and arbitration. Prerequisite: CO309.

CO320 Construction Methods and Equipment
Shear strength, bearing capacity, shallow foundations, deep foundations, slopes, retaining structures and excavations.

CO321 Quantity Surveying and Estimating II
Computer applications in quantity surveying.

CO322
See CIV325

CO358 Ontario Building Code, Parts 3 & 9
The distinction between Part 9 and Part 3 Buildings, basic knowledge of inspection, construction and building classification, separation ratings, provisions for fire fighting, lighting, and emergency power, exiting, health requirements, flame spread ratings and interior finishes, and barrier free requirements for occupancies as regulated under the Ontario building Code and other applicable standards.

CO367 Ontario Building Code, Part 3
Introduction to Part 3, including building classification, separation ratings, sprinklers, provisions for fire fighting, lighting and emergency power, exiting, health requirements, and barrier free requirements.

COLR101 Colour Analysis
Learn the language of colour, how colours interact, the psychology and symbolism of colour, colour harmonies, the seasonal approach to colour and colour in clothing and apply this knowledge to specific colour-related problems in fashion design.

COLR102 Colour Theory I
An introduction to the study of colour systems based on scientific principles of light and colour, aspects of colour in visual communications, including physical, optical and psychological properties.

COLR112 Colour Theory II
The exploration of colour through the use of a variety of materials and techniques such as paints, inks, dyes, paper, photographs and fabrics, colour harmonies, intensities and values, the sensory and the emotional impact of colour on human behaviour and new colour technologies which are available to visual communicators.

COMM103 Communication I
This is a first semester course common to all post-secondary programs at the college. Learn the basic areas and generic skills upon which students will build in later communication courses, how to identify, acquire and assimilate information from various sources. The English for Academic Purposes sector of this course is open to English as a Second Language students who are in need of remediation.

COMM107A English for Academic Purposes
Learn essential communications skills required in order to succeed in a college program and professional career. It focuses on major skills required for effective learning and communicating. Emphasis is put on the needs of second language speakers through concentration on writing and speaking skills.

COMM120 College English
This is a course common to all post-secondary programs of the college. The basic areas and generic skills upon which the student will build in later communication courses include developing study skills, research, critical thinking, language and reading. The objectives of this course are to assist the student to identify, acquire and assimilate information from various sources, to interact with individuals and groups in a civil, productive and co-operative manner, to think critically and to develop rational arguments.

COMM122A English for Academic Purposes II
The continued development of English skills. Prerequisite: COMM107.

COMM123A English for Academic Purposes III
This is the final course for students who do not have English as a first language. It covers the skills discussed in COMM107 and COMM122. Prerequisite: COMM122.

COMM124 Academic Writing
The techniques necessary to interpret primary documents and to write secondary documents and academic essays.

COMM125 Technical Writing
Learn the fundamentals of technical English, vocabulary and formats of technical writing, and the basic principles of effective professional writing.

COMM126 Business Writing
Learn the basic principles of effective written business communications, how to format business letters and memos and understanding of the strategic skills required to become an effective business writer.

COMM127 Field Writing
Learn how to create effective letters, reports and memos, taking observations and determining the difference between fact and opinion.

COMM128 Ward Power
Learn the skills to improve vocabulary and spelling, word roots, suffixes and prefixes, and working rules for spelling.

COMM129 Speaking Out
Learn the skills that are needed to speak publicly, the different types of speaking and gain the skill and confidence to speak in front of people.

COMM130 Reading Effectively
Learn the skills that enhance reading capabilities, with an emphasis on perceptual, reasoning and writing skills, using of a wide variety of source material and the four modes of reading.

COMM131 Report Writing
Learn the effective writing of informal and semi-formal reports, how to format these frequently-used forms of business reports and develop an understanding of the strategic skills required to present information in logically-ordered segments.

COMM132 Communications Theory
Gain an understanding of the communications process and how to develop strategies to enhance their own communications capabilities as well as perceptual, reasoning and interpersonal skills, the background and development of communication theories.

COMM133 Writer's Workshop
Learn to write, read, edit and discuss a variety of work, and several genres of writing, including some combination of fiction, journalism, poetry, personal essays and drama.

COMM134 Critical Thinking
Learn the ability to assess critically what is heard and read in the area of logic. Logic is concerned mainly with the correctness of an argument in which a conclusion is put forward on the basis of premises. The mastery of logic is necessary for clear thinking and argument.

COMM135 Advanced Grammar
Learn the correct use of person and tense, modifiers, parallelism, syntax and diction, sentence variety and emphasis.

COMM136 Job Search and Career Planning
Learn how to research employers, prepare a job search package and prepare for interviews.

COMM137 Formal Presentations
Learn how to run and participate in effective meetings and to prepare and deliver a formal oral presentation in a format designed for a professional setting.

COMM138 Persuasive Writing
Gain skills in the art of persuasion and expertise in applying those skills to business letter writing, report writing and case analysis, identify the differences in rhetorical argumentation and persuasion, analyze and determine the efficacy of that persuasion in several pieces of writing.

COMM139 Debating
Debating deals with the ability to present arguments that can be closely analyzed. It also entails the ability to think on one's feet. Learn what is required for a well reasoned argument and how to defend the position.

COMM140 Formal Reports
Students use research, reasoning and writing skills to produce an 8 to 10 page research report in their field of study, demonstrating that research materials can be accessed and used, that information can be organized and that findings can be clearly expressed in a well-written report using a standard format.

COMM141 Communications for Ceramics
Writing skills and business communications.

COMM142 Business Communications
Learn personal resumé writing, job interview skills, estimate forms, proposals and contracts and the use of computers.

COMM503 Communications and Office Protocol
Learn to write clear, concise and grammatically correct business correspondence and effective oral and customer liaison skills and technical report writing dealing with computer technology.

COMM520
See COMM120

COMM522 Language and Communication
A general review of writing skills including grammar, spelling and punctuation, business writing including memoranda and different types of business letters, report writing and oral presentations, reading research and job search skills.

COMP109 Micracamputer Literacy
The concepts and terminology of computers in general, specific knowledge of a disc-operating system (DOS), commands, peripheral devices and installing software features, application software used to provide competencies such as creating/editing documents, storage/retrieval and formatting.

COMP110 Introduction to Information Systems
An overview of computer organization, data representation, storage, processing and communications, algorithms and their implementation through structured programming techniques in the "C" language.

COMP111 Micracamputer Applications I
The concepts of the DOS/WIN environment, basic word processing features and spreadsheets using computer based learning.

COMP104 Computer Literacy for Desktop Publishing
A brief introduction to micro-computer terminology and concepts. DOS and Window as an operating system, directory and file organisation, word processing, spreadsheets desktop publishing.

COMP114 Type Assembly far DTP
Manual assembly, basic Macintosh PageMaker and imposition using Aldus Presswise. Small projects are created using PageMaker software which are then spat colour separated, printed and assembled manually. Projects range from a simple one-colour postcard to advanced camera-ready artwork using amberlith overlays to show the difference between manual and computer colour break.

COMP120 Programming in C
Learn program development and maintenance in the C language, the basic elements of C, operators and expressions, flow control, I/O facilities, arrays, pointers and the C preprocessor.

COMP121 Micracamputer Applications II
Learn the concepts of database management, electronic mail and presentation software.

COMP122 Management Information Systems
The fundamentals of information systems, technology, business applications and management.

COMP215 Introduction to Desktop Publishing (IBM/Ventura)
Learn to create style sheets appropriate to different work, the layout and typography of newsletters, brochures and direct-mail material.

COMP230 Advanced C Programming
Learn advanced programming concepts such as pointers, recursive functions, complex data structures, dynomic memory allocation and linked lists, and complex programs using top-down design methodology.

COMP231 Database Management Systems
Learn the features of current database management systems, relational and object-oriented databases, SQL, Query Management, database administration, client/server and distributed database systems.

COMP232 Systems Analysis and Design I
Learn classical and modern structured tools for describing data flow, data structure, process flow, business locations and processing requirements applied to documenting application requirements.

COMP240 Interactive Non-sequential Programming
An introduction to interactive multi-file business transaction processing applications using non-sequential files, develop algorithms and apply techniques of structured program design in developing interactive COBOL programs for processing indexed sequential files.

COMP241 Database Management Application Development
Examine current and future database management systems and the application development tools associated with the fourth generation environment, relational databases, form/screen generators, report generators, application generators and related software to obtain information from database systems.

COMP242 Systems Analysis and Design II
Learn the systems design phase of the systems development life cycle, classical and modern structured tools for describing file and database design, computer dialogue design, input and output design and physical design.

COMP317 Introduction to QuarkXPress
Learn the Macintosh basics, including system components, image quality, file organization and manipulation, use of other software, measuring systems and concepts peculiar to desktop publishing, typography, and page design. QuarkXPress is a recognized, professional-level program for page layout, typographic options and the integration of other program files. Hands on experience with QuarkXPress.

COMP319 Page Layout and Typography far Desktop Publishing (QuarkXPress)
Learn the origin of various typographic conventions and modes, current and traditional practices, criticism of professionally-produced work and class projects. QuarkXPress is used to produce tickets, leaflets and mailing labels, and students will deal with features such as master page construction,the use of templates, photo-editing and illustration software.

COMP322 PageMaker - Document Production (IBM or Macintosh)
Learn different forms of composition, how to format basic typographic concepts such as fonts, sizes, kerning, indents for newsletters, forms and reports using word processing content, drawing software to create simple line art illustrations imported and integrated with the text.

COMP325 Ventura Publisher (IBM)
Learn the production of formatted documents, use files generated in word processing software, automatic indexing, frame anchoring, automatic content page generation, information and illustrations imported from other software and HP Scanjet. Includes an introduction to Corel Draw.

COMP350 Object-oriented Programming
An introduction to object-oriented programming techniques using C++, encapsulation, inheritance and virtual functions, and object-oriented design philosophy.

COMP351 Distributed Application Development
The tools and programming techniques for the development of multi-user client/server transactional applications in a distributed environment.

COMP352 Networking and EDI
The fundamental data communications and network concepts, protocols and standards, local and wide area networks and the implementation of network technologies.

COMP353 Operating Systems
Learn the principles of operating systems, concurrent processes, CPU scheduling, deadlocks, memory management, protection and security.

COMP360 GUI Application Development
Graphical User Interface is the focus of this application development course. The emphasis will be on the use of the capabilities provided by visual programming languages.

COMP361 Client-Server Transaction Processing
Work in project teams using CASE and Client/Server Application Development tools to develop, test and implement client/server RDBMS on-line transaction processing systems.

COMP362 Network Administration
Topics include the creation and configuration of user accounts, login scripts, user profiles, creation and configuration of print queues and servers, installation of applications, network security, backup strategies, network management.

COMP363 Imaging and Multimedia
Image, sound and video as components of business operations are examined. Learn to utilize imaging and multimedia tools to prepare simulated business applications.

COMP512A Typography Terms and Concepts
Gain a fundamentol understanding of where typesetting fits in the overal system of graphic communications, type production, terminology and concepts, measuring systems and modes of typesetting such as justified, flush left, right, quad centre, dot leader and tabular, desktap composition..

COMP514C PageMaker (IBM or Macintosh)
Rough ideas of various page layouts are converted to screen representations, duplication and resizing of elements at the design, integrating word processing text, storing and recalling material procedures. The objective is to become competent with most aspects of an icon-driven system.

COMP515B PageMaker - Document Production (IBM or Macintosh)
Concentrates on different forms of composition. Learn to format newsletters, forms and reports using content prepared with a word processing system, drawing software to create simple line art illustrations imported and integrated into the text, use resident software to conduct spell checking, kerning and other editorial and typographic management systems.

COMP518 Computer Graphics/DeskTop Publishing II
Learn the Adobe Illustrator software and QuarkXPress. The student is encouraged to use the Macintosh computer to complete projects in other subject areas.

COMP519A Page Layout and Typography far Desktop Publishing
Learn the origin of various typographic conventions and modes, current and traditional fashions, criticize professionally produced work and class projects, using EDC skills to produce a wide variety of layouts, including tickets, leaflets, mailing labels, newsletters, financial statements and reports, photo-editing and illustration software.

COMP520 Introduction to Desktop Publishing (IBM/Ventura)
See COMP325

COMP521 Ventura Publisher (IBM)
See COMP325

COMP525 Introduction to Printing Processes
Gain an overview of the printing trades, major printing techniques, typesetting/desktop composition, camera/plate surface preparation, letterpress printing, lithography, gravure/flexography and binding and finishing.

COMP526 Computer Graphics/ DeskTop Publishing I
Learn the Macintosh operating system and software with Microsoft Word (word processing), Super Paint (graphics) and Adobe Illustrator software.

COMP529
See COMP317

COMP531 Copy Preparation
Learn the basics of preparing camera ready copy though the medium on conventionol paste-up techniques, the components of electronic desktop publishing techniques, how to handle computer hardware and software..

COMP534 Computer Literacy far Desktop Publishing
See COMP104

COMP536 Type Assembly far DTP
See COMP114

COMP539 Introduction to Desktop Publishing (PC-PageMaker)
The prime objective of this module is to give the student competence with most aspects of an icon driven system. The course proceeds from rough ideas of various page layouts using the software's window/ icon utilities, and includes resizing of various elements of the design. It is intended to deal with the layout and typography of newsletters, brochures, and direct mail material. .

COMP540 Page Layout and Typography far Desktop Publishing
This course traces the origin of various typographic conventions and modes and instructs the student in both current and traditional fashions. The student will constructively criticize professionally produced work and class projects, using their EDC skills to produce a wide variety of layouts, including tickets, leaflets, mailing labels, newsletters, financial statements and reports. Photo-editing and illustration software is introduced.

COMP547 Adobe Illustrator far Graphic Production
Working with templates and artwork, using scanned images, opening, closing, naming and saving documents, planning artwork, correcting mistakes, drawing paths, rectangles and ovals, selecting objects far modification, typography, moving, copying and transforming, working with other applications.

COMP548 Adobe Photoshop far Graphic Production
Colour theory in regards to RGB, CMYK, their relationship to printing, colibration problems, bitmap editing techniques, printing and editing tools and functions, making and manipulating elements, printing RGB to grey scale images, printing halftones, colour composities and separations, placing Photoshop images into desktop software.

COPY305 Creative Copywriting II
In this course, the student more fully develops ideas, concepts and creative copy. The student works individually and in groups to write copy relating to graphic design in signage, packaging, P.O.P., brochures, reports and advertising in various media, such as television, print, and radio for national and retail markets.

COPY315 Creative Copywriting III
This course focuses on the perfecting of writing techniques and communications skills. Emphosis is placed on portfolio pieces, presentation style, letter writing, resumé preparation and competitions.

CORP201 Corporate I
This course formalizes and elaborates on the basic rules of design as they apply to corporate design. The research, design and application at the symbols or logas to various formats such as letterheads, signage and publication are explored. Emphosis is placed on typography and its application to solving design problems.

CORP211 Corparate II
This course continues to formolize and elaborate on the basic rules of design as they apply to corporate design. The research, design and application of symbols or logas to various formats such os letterheads, signage and publication are explored. Emphosis is placed on typography and its application to the solution of design problems. The student concentrates on the creation of a corporate identity appropriate to a specific torget audience for a client's products or services.

CORP305 Carparate III
This course continues to concentrate on the successful creation of corporate identity appropriate to a specific target audience for a client's products or services. The research, design and application of symbols or logas to various formats such as literature, retail, packaging and product ore explored. Emphosis is placed on typography and its opplication to the solution of design problems. The student works through the entire design process from client contact to strategic concept development, through research and design to final production.

CORP315 Corparate IV
This course continues to concentrate on successful creation of corporate identity appropriate to a specific torget audience for a client's products or services. Emphasis is placed on computer technology for type modification, placement and layout. The student works through the entire design process from client contact to strategic concept development, through research and design to final production.

CORP513 Carparate Design
The student will create symbols or logo types to project the desired corporate images. Attention will be given to typography, colour and form with equal emphosis on finished art and specifications for printing production.

CS200 Valunteer Management
Through theory and practice, students will acquire the coordinating skills that are helpful in utilizing resources and working with residents, other staff, utilization (audio-visual, educational and social), the recruitment, training and direction of valunteers, supervision of field placement and agency liaison

CUL400 Dimensions of Italian Cuisine
This course introduces the student to the cultural history of Italy, including a look at the geographic, linguistic, religious, and political history of the country, its art, architecture, music, literature and Italian life.

CW122 Human Growth and Behaviour
This course provides an age/stage survey of the process of human development. Physical, cognitive, emotional and social characteristics and needs of each stage are studied with a view to relating these differing characteristics and needs to creative community work.

CW132A Sociology
This course introduces basic concepts of sociology and applies them to social institutions, communities and small groups. An emphasis is placed on those phenomena most frequently encountered by community workers.

CW135 Community Wark Theary and Practice I
Students develop an understanding of community work models, methods and techniques. What community work is, why it is important, and how we can do it most effectively, are the key questions explored in this course.

CW136 Political Science I
A study of political processes in the community as they affect the role and tasks of the community worker or community organizer. The first year is on introduction to political structures. The major divisions in society are identified, and their effects upon the political system are discussed.

CW139 Community Wark Theary and Practice II
See CW135

CW140 Political Science II
See CW136

CW143 Human Rights
An introduction to human rights issues, information, and skills.

CW145 Field Preparation
Group discussion and speakers from the field help students develop goals and objectives for field work in semester 2.

CW146 Interpersanal Communication
This course is experiential and introduces the student to interpersonal communication skills. These skills provide the basis for future study in group dynamics and counselling.

CW147 Group Dynamics
Processes in Facilitating Community Groups is taught through class discussion and experiential learning activities. Students will learn the skills of process observation which allow a group worker to intervene effectively in group process.

CW148A Field Wark I
Students in the Community Worker program work in field placements for half of their learning time, enabling them to learn new skills and become aware of community resources. Learning goals are clearly set and evaluated in co-operation with the placement organization and college liaison.

CW149 Field Wark Seminar I
The seminor provides a support and problem solving group for the student beginning field work, with a focus on the demands and tasks in the field.

CW150 Community Wark Administration
This course provides an introduction to office procedures and time management. Students produce a funding proposal during this course.

CW206 Field Wark II
A more intensive and extensive experience in the field is provided, involving more complex and independent tasks for the student. More opportunity for integrating theary, skill development and normal agency responsibility is provided.

CW236 Field Wark Seminar II
Students will develop skill in evoluating their own practice using the feedback and support of the group to achieve this goal. Methods will include sharing of cases, discussion of staff relations and program evaluation.

CW238 Counselling
Students will learn to apply counselling techniques in a variety of situations, e.g. intake interviews, information and referral counselling, crisis intervention and supportive counselling.

CW251 Group Dynamics II
Following an CW141, this course functions as a "lab" for the practice of the skills of group development, facilitation and leadership.

CW245 Community Work Theory and Practice III
Role play, exercises, presentations and advanced readings are used to further develop an understanding of the community worker's role and the implications of different community development strategies. The student is also sensitized to value and attitude differences as part of an analysis of the community.

CW246 Political Science III
Students will develop further understanding of Canadian political processes with special focus on the consequences at social policy for various groups. Modes of citizen participation in the political process will be discussed.

CW249A Community Work Theory and Practice IV
See CW245

CW250 Political Science IV
See CW246

CW252 Field Work III
See CW206

CW253 Field Work Seminar III
See CW236

CW254 Canadian Social Policy
This course will review the history of social policy formation in Canada.

CWE401 Work Experience-Externship
The hospitality student will participate in an ongoing paid weekly work experience offered throughout the first 18 weeks of the program. This is complemented by a supervised externship in an Italian kitchen of international reputation in Italy, or by special arrangement in a quality North American Italian kitchen.

CWE402 Administrative Field Placement (4 Weeks)
This refers to a minimum requirement of 160 hours in-service training providing students with additional insight into the work of a Food Service Supervisor.

CWE402 Clinical Field Placement
Upon completion of the clinical-related courses (institutional menu planning, physiology and therapeutic diets), each student will be placed in a general hospital for a two-week period to observe, assist and function as a clinical foodservice supervisor. Students will be evaluated according to competencies developed by the CFSSA and CDA.

DAY100 Infant and Child Development
This course examines the development of infants and young children from conception to adolescence. The areas of physical, cognitive-language and socio-emotional development will be examined at different stages of development, with particular emphasis on the role of the adult in fostering development. It is hoped that the knowledge gained from this course will serve as the foundation for the student's work in teaching young children.

DAY101 Interpersonal Communications
In this area of study, the student examines behavioural differences, causes, and methods of improving interpersonal communication skills.

DAY103 Health, Safety and Nutritian
This course is designed to provide the student with a basic working knowledge of the principles of health and nutrition.

DAY104 Creative Activities
This course is designed to enable students to became knowledgeable of their appropriate role as facilitators in early childhood creativity.

DAY105 Field Practice
This course is designed to provide the student with an appropriate supervised setting (Day Care Agency) where they can practice their theoretical knowledge at early childhood.

DAY106 Preschool Skills Workshop
This age related skills workshop offers students both applied knowledge and support in curriculum ideas. Music and story telling are a focus for this course.

DAY107 Field Seminar
This course is designed to provide appurtunity for students to reflect on and share field experiences.

DAY108 Principles of Early Childhood Education I
This course is designed to study the Early Childhood Education environment, the role of the teacher, and programming for young children. Classes consist of lectures, group discussions, and demonstrations for four hours per week in Semesters 1 and 2.

DENT104 Preventive Dentistry
The course explores the scientific basis of disease prevention, treatment of various stages of disease and individualized home care involvement for the dental client. The many topics hove been separated into 8 modules which define and describe the etiology, clinical consequences and prevention of dental diseases.

DENT106 Dental Materials I
This course is designed to help dental assisting students, through a series at lectures, slide and video presentations and lab experience to develop an understanding of the chemical and physical properties and uses of Direct Restorative Materials.

DENT107 Dental Materials II
This course is designed to help dental assisting students develop an understanding of the chemical and physical properties and uses of Indirect Restorative Materials.
Prerequisite: DENT106.

DENT109 Pre-Clinical Dental Radiography
This course is designed to help dental assisting students meet the requirements af the Healing Arts Radiation Protection Act (HARP). Through theory lectures and laboratory practice the student will became proficient in intra-oral radiographic techniques, radiographic processing and radiation safety methods. Prerequisite: ANAT117.

DENT112 Clinical Dental Radiography
This course through theory lectures and clinical practice will further the dental assistant's skills in intra-oral and extra-oral radiographic techniques to produce radiographs of diagnostic value with maximum patient safety and comfort while meeting all requirements of the Healing Arts Radiation Pratection Act.
Prerequisite: DENT109.

DENT119 Dental Office Procedures
A lecture, seminar and independent study course designed to familiarize the dental assistant with a wide variety of office procedures which will facilitate the efficient administration of a dental business athe.

DENT123 Ethics and Issues for the Dental Hygienist
This course will provide an opportunity for dental hygiene students to reflect on their own ethical values and to determine how such values will impact on their education, clinical practice as well as their personal lives. Students of dental hygiene will learn the norms and standards of ethical conduct of their profession and will develop their skills at ethical reflection. The ethical standards of the profession will be applied to canonate sets of circumstances in the clinical practice at the program.

DENT125 Crown and Bridge, Prosthadontic & Ceramics I
This course will provide the Dental Technology student with the principles of Crown and Bridge construction.

DENT126 Removable Partial Denture Casting I
This course will cover basic removable portial denture construction. The course will cover the following areas: Temporary, transitional and immediate acrylic removable partial dentures.

DENT131 Manipulation and Application of Dental Materials
This course intraduces the student to the various materials that are utilized in the canstruction af complete dentures and removable partial dentures.

DENT132

DENT137 Advanced Preventive Dentistry
This course covers: theories of preventive dental practices, research in the field of prevention dentistry and students will be involved in the application af research associated with this area of study.

DENT206 Dental Health Education
This course is designed to identify the theoretical and practical approaches to classroom, group, and individual instructional sessions. The students will present dental health programs to various groups.

DENT206A Concepts in Community Health for the Dental Hygienist
This course prepares students to promote oral health and disease prevention in a community or group. Course content will include: definitions of health, community health and community dental health; fundamentals of epidemiology; and the organization of community dental health services in Ontario as well as in other jurisdictions.

DENT209 Advanced Radiography
Through a series of lectures (3) and slide sessions, each student will learn to recognize normal and abnarmal anatomical features from a client x-ray series. Practical experience is also gained by radiographing clients during the assessment phase of Dental Hygiene Care.

DENT210 Complete Dentures
This course is designed to instruct the student in the techniques required to construct complete dentures at an intermediate level.

DENT211 Crown and Bridge
This course is designed to instruct the student in the principles of crown and bridge at an intermediate level and in dental ceramics at a basic and intermediate level.

DENT212 Removable Partial Dentures
This course is designed to instruct the student in both acrylic and cast partial dentures at an intermediate level.

DENT230 Crown and Bridge and Ceramics III
This course will provide the Dental Technology student wha has completed the Crown and Bridge component at the program, with the appartunity to learn the various aspects at Dental Ceramics Technalogy.

DENT234 Partial Dentures III
This course will cover all of the basic areas of removable partial denture construction. The setting and arrangement of teeth, packing and finishing are emphasized.

DENT238 Orthodantics III
This course covers the basic techniques required to fabricate removable and fixed arthadantic appliances.

DENT316 Community Dentistry
This course is designed as an intraduction to the broad field of community health with emphasis on aspects af community dentistry.

DENT400 Science of Dental Materials
This course is designed to help the Restarative Dentol Hygiene student develop an understanding af the clinical and physical properties and applications of direct restorative dental materials. The laboratary course allows the student to manipulate the materials meeting all appropriate criteria.

DENT401 Functional Occlusian
This lecture and laboratary course is designed to teach the Restarative Dental Hygiene student dental anatamy, aesthetics and occlusian. Waxing projects enable the student to gain skills in reproducing the anatamy and occulsion af the dentition.

DERM300 Dermatalogy
The course is intended to provide the Chiropady student with an appropriate study af the skin and conditians likely to be encountered in practice.

DES101 Design
Projects cover the fallowing topics: form and shape; positive/negative texture; line; harmany and dynamic tension; line in space proportian; weight/balance/scale; campasitian; symmetry/asymmetry cancentraian/facus contrast; value, shape, size and direction and one point and two point perspective.

DES103 Design Fundamentals and Concepts I
This course is an introduction to the basic principles and elements of design. Emphasis is placed on those principles and elements used in the fields af graphic design and advertising. The student will be encauraged in the use af right-brain and lateral thinking techniques as applied to creative problem salving.

DES105 Design and Art History
This course is an introduction to the mare prominent styles, individuals and graups in art, design, architecture and furniture which have affected the way in which designers see, understand and interpret things. It investigates the contributians which same countries have made to design. It includes elaboratian on the philasophy, impact and personalities of some af the best designers, artists and illustrators in history.

DES110
See SIGN547

DES124 Design Fundamentals and Concepts
This course continues to investigate the basic principles and elements of design, including both 2D and 3D design. Emphasis is placed on those principles and elements used in the fields af graphic design and advertising. It continues to encourage the student to develop left brain and right brain lateral thinking techniques and to apply these thaught processes to creative problem salving.

DES150 Design
This course covers rhythm and pattern, symbals, themes, matifs, drawing, rendering, mechanical colaur theory and design exercises.

DES169 Design I: Layout
This caiirse covers layout praceidure for geometric shops and workshop drawings. The student then maves into one point perspective, learning relatianships, 2D perspective principles, changes in eye level, finding accurate dimensians, centres diagonals etc. followed by 3D one point perspective, plotting accurately dimensianed boxes and plotting more complex shapes, using shop drawings to abtain two different views (vertical and horizontal) and drawing circles in perspective an 3D ring-like forms. There will be visits to any relevant exhibitians.

DES179 Perspective
In this course the student applies the perspective learned in DES169 to two point perspective; circles, slices, frames and rotation, and varying plan and elevatians to abtain different views. The student also studies the theary, psychalagy and values af colaur, how colaur affects designs, works an specific practical applicatians, and prepares a project for enamelling. A variety af drawing skills and materials are covered, and practically applied in project and free hand drawing assignments at the Museum or Botanical Gardens. Art history will also be included.

DES200 Design and Colour
The student is taught to develop an idea for a design from the thumbnail sketch to scaled sketches and final artwark, then to a project presentation. The effective use of design, typefaces, trademarks or logos and colour are studied. The study includes paint-of-purchase signs and integrated sign systems for the smaller business, including lacatian identificatians an stare fronts, fascia, doors and windaws, and trucks. Colour wheels are demonstrated to produce various colour combinations and colour schemes.

DES201 Design Studies
Projects include 3D file design, colour and value review elements af three dimensional space and form planar suspended construction.

DES203 Design I
This course builds an the fundamental design skills. It stresses type, type mark-up and copyfitting. It encourages the evaluation and development af creative solutions to design problems through emphasis an conceptual thinking, thumbnails and working drawings. It focuses an design, type, layout and presentation of projects for print in such areas as posters, magazines, and annual reports.

DES223 Design II
This course further encourages the evaluation and development af creative solutions to various design problems. It emphasizes type (both display and text) mark-up and copyfitting. It focuses an appropriate design selection and the study of contemporary style. Creative thinking techniques are encouraged and are applied to a variety of 3D projects such as packaging and P.O.P.

DES251 Design Studies
In this course the student will develap portfalia and business design/image, exhibition invitations, business card, letterhead, resumé, and photagraphic slides for portfalia.

DES269 Basic Design
Course cavers: basic design (examining the elements of design); style and taste (including the four different categaries at taste); and design history, which continues the study af design and art history through twa personal research projects.

DES279 Design: Stane Rendering
Course cavers; stone rendering (showing off the attributes af translucent and opaque stanes); design; and design history. The student will visit the Spring Craft Show and produce two design/art history assignments.

DES307 2D Design I
This course concentrates an 2D design and the presentatian af projects for the print medium. These include a variety at items such as pasters, cavers, product and promatianal brochures. Emphasis is placed an developing creative salutions to design problems, enhancing image making and intuitive decisian making.

DES309 3D Design I
This course cancentrates an the design and presentatian af packages, P.O.P. and environments. While the emphasis is an conceptual design and the development of professional presentatian techniques, some projects require verbal presentatian. Thumbnails, working drawings and marker camps are stressed. The student learns to use diverse colaur systems to present designs in a professianal manner ready for the portfalia.

DES317 2D Design II
This course continues its cancentratian an 2D design and the presentatian af projects for the print medium. Emphasis is given to campetitians and call-for-entries from various organizations. The student develops individual talent through a range af design projects which are suitable for portfalia material. The wark program provides the student with the appartunity to experience an actual design studia envirannent.

DES319 3D Design II
This course continues to stress package and P.O.P. design with mare market oriented salutions. It encourages imaginative and experimental approaches to 3D design in response to client envirannental directives. Thumbnails, working drawings and marker camps are stressed. The student learns to use diverse colaur systems to present designs in a professianal manner. The student is introduced to environments and exhibit design as related to graphic design. Portfolio material is developed.

DES369 Jewellery Design
Course cavers: design (including designing a line and taking designs to prototype stage, explaring various finishes and their impacts, among other topics); and rendering (including a small amaunt af rendering review and working an drawings for studios to refine skills).

DES379 Jewellery Design
Course cavers: design (including one of a kind designs of various types); drawing (including various types at rendering and their purpase); and presentation. Last third af semester kept for preparing portfalia. Course includes a visit to Ontario Arts Council for presentatian af "Presenting Yourself" and an examinatian af professianal artist portfalias.

DES469 Design I: Layout
This course cavers layout praceidure for geametric shops and workshop drawings. The student then maves into rendering from the basic forms and tonal values to the use of finishing line to emphasize and list the drawing, and perspective, pragressing to 3D drawing.

DES479 Design II: Rendering Stanes
This course deals with the attributes of translucent and apaque stanes, bath cabochan and faceted, and how to represent characteristic colaur, special effects, unique qualities and light of different stanes. From there the student explores sources for design ideas and researches style and practices and refines skills needed to present designs. Projects include preparing wedding and engagement ring sets and preparing a personal portfalia.

DIC110 Machine Transcription
See BUS143

DIC211 Dictation Techniques
This course is designed to enable students to operate a dictation machine where a variety af material is dictated from prepared text. The student is also taught to prepare text for dictation and to dictate without the use at a prepared text.

DIC513 Dicta Transcription
Upon completion of this course, the student will passess the necessary skill to transcibe dictation using modern desktop dictation equipment at a speed af 240 words in 30 minutes. The daauments produced must be mailable, including praper punctuatian, carrect formot and carrect spelling.

DR105 Introductary Drafting
The course will teach basic drafting skills and their application ta renavation canstruction. It will also develop the learner's skill in visualization af specific cancepts.

DRAW101 Fundamentals of Drawing I
This course is an intraductian to drawing through the abservatian at the human figure. Through a series at exercises, it teaches the student how to see and draw.

DRAW102 Drawing Research
This course intraduces the student to the use af systematic stages for the development of a drawing. A variety af media are explared.

DRAW111 Fundamentals of Drawing II
This course continues the stress an drawing through the abservatian at everyday abjects and the human figure. Through a series af exercises, it continues to teach the student haw to see and draw.

DRAW112 Drawing Research and Multi-Media Rendering
In this course, the student continues to explare the use af systematic stages for the development of a drawing. A variety af media which are used in the fields af graphic design and advertising are explared. Perspective is tought in relatian to interiar renderings, exhibits, signage and outdaar sketching.

DRAW203 Professional Drawing I
This course begins the quest for new discaveries related to the study of the elements, methods and media involved in a strang commercial approach to drawing. The student is encouraged to develop a system af analysis by which to campare their wark to the wark af successful professianal artists, illustrators and designers.

DRAW213 Professional Drawing II
This course is a continuatian af the study of the elements, methods and media involved in a strang commercial approach to drawing. Through a logical, method-oriented system, the student will develap drawing and rendering skills. The development of an individual style is encauraged.

DRAW305 Professional Drawing III
This course interprets the various components which make up drawings and applies them to practical situations. The student works to produce as well as assess a variety af drawings, from interpretive to systematic, from syntactic to semantic. The students learns to abstract, integrate, experiment and canceptualize by illustrative means.

DRAW315 Professional Drawing IV
This course interprets and applies the various campanents which make up drawings to practical situations. The student works to produce as well as assess a variety af drawings from interpretive to systematic, from syntactic to semantic. The student learns to abstract, integrate, experiment and canceptualize by illustrative means. Project solutions require an advanced level af elaboratian and imagination.

DRAW501 Basic Drawing
The student will wark toward developing a sensitivity to the qualities of line, texture, value and colaur for an increased awareness af visual perceptian and an ability to achieve a certain accuracy af representatian.

DRES562 Elementary Dressmaking
This course fauses an the canstruction af pre-cut (prepared) skirt and pant samples and garments and includes the layout and canstruction of the black skirt and blause in muslin. The student will learn haw to assemble the entire garment, in each case using a variety af industrial sewing machines and techniques taught in SEW562.

DRES571 Advanced Dressmaking
This course is a continuatian of DRES562. In this course, the student will put together an original design for a skirt, pant and dress as well as a pre-cut dress. In all cases, the student will apply the industrial techniques learned in DRES562 and will be encauraged to select appropriate interfacings, threads, buttons and other required findings to enhance the creation.
Prerequisite: DRES562.

DSK500 Desktop Publishing
Upon completion of the course, the student will learn the main features of Ventura Desktop Publishing software to produce good-looking brochures, business cards, letterheads, articles, newsletters, resumés and technical daauments.

DTC112 Pre-Clinical and Technical Skills
This course provides the denture therapy student with the theanetical information and the practical experiences related to the canstruction af a complete denture.

DTC200 Denture Therapy Clinical I
In semesters 3, 4 and 5, the denture therapy student cancentrates upan the art and science af providing denture prostheses for the public. Initially, the student will practise an mannequins and will be phased into patient care through the canduct af the course.

DTC203 Denture Therapy Biotech and Prosthodontics

This course is designed to familiarize the student to the physiological implications of denture prosthesis. Considerable emphasis will be placed on prognosis, treatment planning, and occlusal harmony.

DTC301 Practice Management and Ethics

This course is designed to introduce the students to considerations associated with setting up a denture therapy practice. Topics include professional and interpersonal relationships within the dental health team, and code of ethics.

DTC302 Advanced Portiol Dentures

This course will involve clinical denture therapy cases involving the construction of removable partial dentures.

DTC313 Denture Therapy Practice III

This course further develops the students' clinical reasoning, technical skills, communication skills and treatment planning in regard to denture therapy practice.

EC103 Economics I

This course introduces the student to the nature of economics, basic terminology, the uses and limitations of economic analysis and economic models and systems. The student will learn to understand and evaluate the methods used to measure the performance of the economy, the gross national product, consumer price index and the unemployment rate.

EC104 Econamics II (Microeconamics)

This course is a continuation of EC103. It will explore the relationship between employment, inflation and price; how to enumerate the various kinds of unemployment and their respective causes; and how to recognize the malleability of statistical measurements and the controls used.

EC105 Introduction to Economics

This is an introductory economics course which familiarizes students with economic principles and examines the current major economic issues in Canada, such as inflation, unemployment, and government programs and regulations created to deal with such problems.

EC106 Econamics

This is a study of the economic principles surrounding supply and demand, Gross Damestic Product, taxation and government's role in the economy.

EC107
See EC105

EC112 Econamics

This course provides the student with a simply stated introductory account of economics, concentrating on the international forces which influence the Canadian fashion industry. The student will be able to evaluate the effect of such pressures and occurrences as free trade, quotas, subsidies and political, social and product susceptibility; and adjust to or adapt such measures as appear likely to improve competitive status.

EC113 Labour Economics

This course will introduce the student to the basic concepts in labour economics and will provide an understanding as to the varying structure, conduct and performance characteristics of labour markets and show its relevance for human resources divisions. Labour market behaviour will be analyzed.

EC120 Introduction to Economics

This course provides an understanding of the capitalist enterprise system and the economic principles central to business activity in a free market economy. It includes the theory of supply and demand, business cycles, monetary policy, consumer index, gross national product, income and expenditure.

EC210 Microeconamics

This course surveys microeconomics, including an overview of the market system, demand and supply, elasticity, and the drafting and proper use of graphing. Various market structures- pure competition, monopoly, monopolistic competition and oligapoly-are examined. Markets for factors of production- labour, capital and natural resource are also examined, along with the distribution of income and wealth and the role of government in the market system.

EC211 Macroeconamics

This course examines the problems and issues pertaining to the Canadian economy as a whole, including recession, unemployment and inflation. Economic models and theories are used to explore both causes and possible remedies.

EC300A Building Economics

This course gives the architectural technology student a basic understanding of the economics of building as related to construction. Topics include design/cost relationships, methods of estimating and a feasibility study.

ECE100 Infant and Child Development

This course will examine the growth and development of the child from conception through middle childhood. The focus will be on the physical, social, cognitive and emotional development of young children. Current research findings and theoretical advances will be discovered particularly in terms of their application to the lives of children.

ECE101 Health, Safety and Nutrition

The study of health, safety and nutrition will be related to the needs of the young child. The course will emphasize the importance of knowledgeable early childhood educators in his area and their day-to-day responsibilities to themselves, children, families and community. Attention will be given to health issues in a cross-cultural context.

ECE103 Interpersonal Communication

This course introduces the student to interpersonal communication theory and practice as it relates to early childhood education environments. It follows an experiential format that encourages students to reflect on and identify their strengths as communicators. Classes will provide students with opportunities to learn and practice communication skills.

ECE105 Creative Expressions I

This course will explore creative art activities for infant, toddler, preschool and school-age children. Emphasis is placed on open-ended, child-directed activities which are related to the whole child. The course includes classroom lectures, discussions and hands-on workshops.

ECE110/111 Field Work Seminar

This class will provide students with opportunities to meet with fellow students and their supervising faculty to discuss their progress at field placements. The seminar discussions are environments which foster professional growth and development.

ECE112 Age-Related Skills Seminars

The three age-related skills seminars (112 Infant/Toddler, 115 Preschool and 223 School age) will offer students both applied knowledge and support in curriculum areas while completing a Field Practice course with the same age group. These courses reinforce the core principles that are taught in Principles of Day Care I and II.

ECE113/114 Field Practice

Field practice will provide a continuum of experience which provides the student with the opportunity to integrate and apply theory. The student is expected to demonstrate the necessary self-awareness, attitudes and skills which will enable him or her to work competently with children, families and co-workers. All students will complete a field practice with infants, toddlers, preschool children and school age children.

ECE115 Preschool Skills Warkshop
See ECE112

ECE119 Principles of Childhaad Educatian I

The course introduces the student to child care environments, the role of the early childhood educator, and programming for young children. The course is based on the premise that early childhood settings should be child-centred and promote learning through play.

ECE200 Human Growth and Development

This survey course examines human growth and development from middle childhood to death. It will help the student understand the changes that occur in human ages and stages of development. The focus is on the physical, social and cognitive and emotional development of the human being.

ECE201 Children with Special Needs

This course introduces the second year early childhood education student to some of the causes, manifestations and behaviours of children with challenging needs. Diagnosis, prognosis, social implications and specific teaching methods are discussed.

ECE204 Histary and Philasaphy

This course examines the major philosophical approaches that have influenced early childhood education today. It includes a review of the history of early childhood education in Canada, and an overview of the contributions made by philosophers, educators and psychologists.

ECE206 Family Dynamics

This course will encourage the student to develop a conceptual understanding of various family structures, roles, values and communication patterns. Relationships among family members will be discussed as well as characteristic methods of conflict resolution.

ECE207 Parent Involvement

This course surveys the rationale for and methods of parental involvement in Early Childhood Education. Students will be given the opportunity to review a variety of communication techniques and parenting programs.

ECE209 Creative Expressions II

This course builds on the skills gained in ECE105. Three-dimensional art activities will be explored in a series of workshops in addition to further discussion of art principles as they apply to the developing child.

ECE210/211 Field Work Seminar
See ECE110/111

ECE212/213 Field Practice
See ECE113/114

ECE217 Principles of Early Childhaad Educatian II

In the second year of Principles of Day Care the course continues the study of programming for young children and is developed from the same set of beliefs about group care and its curriculum. The role of the teacher in social emotional development and the application of Piagetian theory to practice are given special focus.

ECE220 Policy Management and Legislation

Students will be oriented to the legislative and policy framework for child care services in Canada. The format of the course allows the student to explore the various roles of staff, administrators, parents, boards of directors and the provincial authorities in high quality child care programs.

ECE223 School Age Warkshap
See ECE112

EDP105 Elementary Computer Concepts

In this course, the student is introduced to computers and learns how to use a PC to perform very basic functions with some of the popular software used in the industry.

EDP116 Micra and Business Applicatians

This course introduces the student to a variety of software applications. The student learns to use DOS, WordPerfect, LOTUS 1-2-3 and dBASE III Plus.

EL111 Electrical Fundamentals

This course covers the nature of electricity, international systems of units, atoms and their structure, current and voltage, resistance, insulators, Ohm's Law, series and parallel D.C. circuits, series-parallel or combination circuits, power in D.C. circuits, resistivity, wire calculations, resistance change with temperature, magnetism and electromagnetism, magnetic circuits, inductance, transients in inductive circuits, capacitance, transients in capacitive circuits, resistance networks, equivalent circuits, network theorems, design of D.C. ammeters, voltmeters, ohmmeters and wattmeters.

EL111A Electrical Fundamentals (Theary and Lab)

Nature of Electricity, international system of units, atoms and their structure, electron theory, current and voltage, conductors and insulators. Resistance, wire calculations, power in the D.C. circuit, series and parallel circuits. Magnetism, electromagnetism and magnetic circuits. Inductance and transients in inductive circuits. Capacitance and transients in capacitive circuits. Resistance networks, equivalent circuits and network theorems. The theory is interspersed with laboratory projects which present proof for the above theory topics.

EL116 Electrical Laboratory D.C. Circuits

This course covers dongers of electricity, safety rules, Ohm's Law, series, parallel and combination D.C. circuits, power dissipation, source resistance, power transfer, magnetization curves, capacitors in D.C. circuits, application of network theorems to D.C. circuits and meter calibration.

EL121 Direct Current Machines

This course covers construction and operation of separately-exited, shunt series and compound generators; armature windings; commutation; three-wire generators; dynamotors; series boosters; Ward-Leonard system; construction and operation of shunt, series, compound motors; speed and torque characteristics; maintenance of D.C. machines. The course covers theary and practical.

EL121A Direct Current Machines (Theary and Lab)

Construction and operation of separately-excited, shunt, series and compound generators; commutation; dynamotors; construction and operation of shunt, series and compound motors; speed and torque characteristics. This theary is interspersed with laboratory projects starting with safety rules, voltage characteristics or separately excited, shunt and compound generators; efficiency and losses of D.C. generators; D.C. shunt and compound motors, losses and efficiency of D.C. motors.

EL122 Electric Circuits - AC

Course covers construction and operation of a basic A.C. generator; sinusoidal voltage and current equations; instantaneous, average, and effective values; inductive and capacitive reactance; impedance, A.C. series and parallel, circuits, admittance, power, reactive and apparent power in single phase circuits; phasor diagrams; series and parallel impedances, series and parallel equivalents, complex circuits; A.C. networks; resonance; transformer action and ratio; voltage, current and power in balance three phase systems; A.C. instruments.

EL122A Electrical Circuits (Theary and Lab)

Principle operation of A.C. generators, sinusoidal voltage and current equations, instantaneous values, average and effective values. Inductive and capacitive reactance, impedance. Series and parallel A.C. circuits. True power, reactive power and apparent power, power factor and power and parallel impedances, series and parallel equivalent circuits, impedance networks and application of network theorems. Principle theary and operation of transformers. The theary is interspersed with laboratory projects which present proof for the above theary topics.

EL145 Industrial Electronics II (Theary and Lab)

Course covers: resistor colour code; introduction to electronic test equipment; bias calculations; operation and characteristics of semiconductor diodes, rectifier circuits, zener diodes, bi-polar transistors, SCRs, triacs, Thyristors and light emitting diodes. Resistor colour code; introduction to electronic test equipment; operation and characteristics of semiconductor diodes, Zener diodes, bi-polar transistors, Sci's and Triacs. Operation of rectifier circuits. Labs will be interspersed with theary to reinforce the theoretical points.

EL156 Electrical Laboratory, A.C. Circuits

Course covers: safety rules; Ohm's Law for A.C. circuits; capacitive reactance; inductive reactance; impedance at RC, RL and RLC series and parallel circuits, power dissipation in A.C. circuits, complex impedances in series and parallel, resonance, power factor, power factor improvement.

EL157 Electricol Labaratary, D.C. Machines

This course covers dangers of rotating equipment and safety rules, voltage characteristics of separately excited, shunt and compound generators; efficiency and losses of D.C. generators; parallel operation of D.C. generators; D.C. shunt and compound motors, losses and efficiency of D.C. motors, elementary D.C. motor control.

EL219 Power Plant Electricity

This course constitutes a practical electrical shop. The student will learn safe electrical shop procedures and electrical safety, the operation of A.C. and D.C. motors, testing of electrical circuits and safety devices, and checking practical wiring circuits for electrical faults using meters and schematics.

EL224 Electric Machine Controls

Operation and use of control and timing relays, contactors, manual and magnetic starters. Limit, pressure, float and flow switches, magnetic and eddy current brakes, reversing, braking and regeneration systems for A.C. and D.C. machines. Special requirements for wound rotor and synchronous machines. Design and analysis of simple machine control circuits and systems. Purpose and use of "Failsafe" controls, introduction to solid state control equipment.

EL231 Power Plant Electricity

In this course the student will use the skills developed in the previous electrical shop procedures and study generator construction and operation, measurement of torque, types of motors, motor starting devices, and speed and speed regulation.

EL232 Alternating Current Machines

This course covers transformer principles, construction of single phase and three phase transformers, standard transformer tests, voltage regulations, auto transformers, parallel operation, single and three phase transformer connections; operation and construction of alternators, stator windings, rotor windings, impedance, voltage regulation alternator tests and regulation calculations, armature reaction, paralleling, other related matters.

EL232A Alternating Current Machines

Alternator principles, construction and operation of three phase synchanous motors, phasar diagrams, power factor control, phase induction motors, torque, single phase induction motors, transformer principles, construction and connections of single phase and three phase transformers, standard transformer tests, voltage regulation parallel operation, auto transformers.

EL234 Electrical Distribution Systems

Review of A.C. fundamentals, review of balanced three phase systems; unbalanced three phase four wire wye connected loads, unbalanced delta connected loads, phase sequence; measuring power in three phase circuits, two wat meter method; electrical power systems, hydro electric, fossil fuel and atomic power stations; overhead and underground distribution systems; the basic power circuit, system voltage regulation, transmission line calculations; lightning arrestors; fuses and circuit breakers; coordination of protection.

EL234A Electrical Distribution Systems

Phase sequence and systems, electric power system, basic power circuit, system voltage regulation, transmission line calculations, lightning arresters, fuses and circuit breakers, safety rules, phase sequence determination; voltage current and power in balanced wye or delta loads; voltage current and power in unbalanced wye or delta loads; three phase power factor and power factor improvement; three phase transformer connections; power flow and voltage regulation of a simple transmission line.

EL236 Industrial Electronics III

This course covers A.C. and D.C. transistor load lines, A.C. gain calculations for the common emitter, common collector and common base amplifier circuits; cascaded amplifiers.

EL236A Industrial Electronics III (Theary and Lab)

Introduction to transistor common emitter, common base and common collector circuits. Transistor biasing, loadlines and gain calculations. Introduction to operational Amplifiers and their use in amplifying and regulation circuits. Labs will be interspersed with theary to reinforce the theoretical points.

EL237 Electrical Distribution Laboratary

Review safety rules, voltage, current and powers in balance wye and delta loads; voltage current and power in unbalanced three phase loads (four wire wye, three wire wye and delta); three phase power factor and power factor improvement; phase sequence determination; three phase transformer connections; real and reactive power; power flow and voltage regulation of a simple transmission line.

EL239 Industriol Electranic Labaratory III

This course covers construction and evaluation of: common emitter, common collector, common base amplifier circuits, and cascoded amplifiers.

EL245 Wiring Methods and the Electrical Code

This course covers wiring materials including conduit, armoured cable, sheathed cable, mineral insulated cables, aluminium sheath cables, busways, wireways, services, residential commercial and industrial; devices; fixtures, motors, equipment and wiring methods in hazardous locations, electrical safety code applications.

EL250 Environmental Systems

This course covers fundamentals of light, lighting terms and units, lighting laws, light sources, lighting calculations, electric power requirements for lighting systems; basic concepts of electrical heating and air conditioning, R values, heat loss calculations, electrical power requirements for heating and air condition systems.

EL251 Camputer Programming

This course covers: fundamental concepts of programming, programming languages, programming in the BASIC language; variables, arithmetic operations, mathematical functions, input and output of data, conditional and unconditional branching, loops, arrays and subscripted variables and matrices; preparation of flowcharts and preparation of problem-solving programs for the electrical technology field.

EL252 Electrical Laboratory A.C. Machines

This course covers review of safety rules, transformer rotion and polarity, transformer voltage regulation, transformer losses and efficiency, operation of auto transformers, poly phase transformer connections; alternator operation, alternator regulation, alternator losses and efficiency, parallel operation of alternators; operation, losses and efficiency of synchronous motors, torque angle characteristics, V curves and power factor curves for synchronous motors; power factor improvement; operation, losses and efficiency of wound rotor and squirrel cage induction motors.

EL254 Industrial Electranics IV

This course covers introduction to digital techniques; binary number system; binary codes; semiconductor devices for digital circuits; digital logic circuits; digital integrated circuits; operation of flip flops, registers, counters, shift registers and digital applications including digital measuring devices and their uses; introduction to programmable controllers.

EL254A Industrial Electranics IV (Theary and Lab)

Introduction to digital techniques, digital applications and digital integrated circuits. Operation of flip flops, registers, counters and shift registers. Introduction to Programmable Logic Controllers, relay ladder logic instructions, timers and counters. This theary is interspersed with laboratory projects in evaluation of switching circuits, T.T.L. logic circuits including the application of logic gates, flip flops, registers and counters.

EL255 Industrial Electranic Laboratary IV

This course covers construction and evaluation of switching circuits, transistors logic gates, T.T.L., logic gates, C MOS logic gates; application of logic gates, flip flops, registers, counters shift registers and decoders, relay logic ladder instructions, timers and counters.

EL256 Camputer Operating Systems

Introduction to files, storage systems and media, introduction to operating systems, directories, paths and trees, system configuration, hidden files, batch files, special batch files, batch commands. Getting help, edit the DOS text editor, DOS error messages.

EL25B Technical Report

The student completes a 2,500-word report on some piece of electrical or industrial electronic equipment or circuit. Information is to be obtained from the available technical magazines and books in the reference section of the Toronto Public Library system.

EL343 Pratection of Electrical Equipment

This course covers transmission line equivalent circuits; per unit analysis, faults on power systems, short circuit calculations; circuit interrupting process; high voltage circuit breaker design; high voltage fuses; system instrumentation; types of protective relays; malfunctions of alternators and transformers; relay protection of alternators, large transformers and large motors; coordination of protection; relaying zones; ground fault protection of distribution systems.

EL344 Industrial Electranic V

This course covers review of number systems, building blocks of the micro computer, computer arithmetic, straight line programs, algorithms, branching, stack operations and use of subroutines; bias calculations, transfer characteristic curves and A.C. gain calculations of the J FET and MOSFET amplifier.

EL345 Industrial Electranic Laboratary V

This course covers experiments using the 6800 microprocessor; conversion from hexadecimal to decimal program, arithmetic operations, program branching, condition code registers and subroutines; construction and evaluation of J FET and MOSFET transfer characteristic curves and amplifier circuits.

EL353 Electrical Laboratory Systems

This course covers polyphase transformer connections: delta delta, delta wye, with or without tertiary winding, wye delta, three phase autotransformer, open delta, delta zigzag, delta six phase double wye, delta six phase double delta, open wye, open delta, regulation of transmission line voltage; power flow in transmission lines.

EL364 Electrical Machine Design

This course covers general design procedure; design of single phase and three phase transformers; design of poly phase induction motors; design of synchronous machines; design of D.C. machines; design of solid state motor control system.

EL365 Electrical Estimating

This course covers analysis of electrical drawings including electrical heating, take off procedures, pricing labour costs, adjustments for working conditions and non-productive costs; incidental and direct job costs; analysis of specifications.

EL366 Research Assignment

Part of EL364, this course requires the student to research and design a specific electrical motor, generator, transformer, or solid-state motor control system. The completed design is to contain all necessary calculations to meet the given specific data and limits, as well as scales detail and layout and assembly drawings that show all major dimensions and materials used.

EL367 **Industriol Electronic VI**

This course covers Darlington pair, differential amplifiers, operational amplifiers, negative feedback, camparators, integrators, differentiators, ap-amp regulators, automatic control af D.C. motors, D.C. and A.C. variable speed drives, large current poly phase rectifiers and inverters. Interfacing the 6800 microprocessar.

EL368 **Industriol Electronic Laboratory VI**

This course cavers construction and evaluation af operational amplifiers, integrators, differentiators, ap-amp regulators, Schmitt trigger, SCR and TRIAC firing circuits. Troubleshooting D.C. and A.C. variable speed drives. Interfacing experiments using the 6800 microprocessor.

EL369 **Electrocl Installotions**

Upon completian af this course the student will be able to interpret drawings of electrical installations and power distribution; understand the basic design requirements required for residential wiring; and interpret applicable sections af the Canadian Electrical Code.

EL370 **Programmoble Logic Controllers (Theory and Lob)**

All projects are designed to aperate an Allen-Bradley R programmable controllers and I.B.M. R Campatible A. T. R Computers. Course will cover: definition, relay ladder logic instructions, non-relay instructions, timers and counters, mash instructians, word instructions, programming examples, troubleshooting procedures, interfacing and commissioning bath A.C. and D.C. matar control drives.

ELCT502 **DC Circuit Characteristics**

This course introduces the basic concepts af electricity. Batteries and resistars, in-series circuits, parallel and series/parallel circuits, Ohm's and Kirchaff's Laws, are cavered. Capacitars and inductors are described together with their applications in time-constant circuits. The caurse also cavers basic meter circuitry for the voltmeter, ammeter, and ahmeter, internal resistance af generators, and loading effects af meters.

ELCT503 **AC Circuit Characteristics**

The generation and characteristics af an AC signal and some af its important applications are introduced. Instantaneous, average and RMS values af the AC signal are measured and explained. Reactance, bath inductive and capacitive, as well as transformers are cavered.

ELCT504 **Electrical Circuits Lobaratory**

This course reinforces the theary partian af the first semester. Safety procedures, circuit canstruction, measurements af circuit parameters and proper use af measurement instruments are stressed. Troubleshaating and circuit tracing are included.

ELCT505 **Digitol Fundomentols and Circuits**

Topics cavered in this caurse are: numbering systems, basic AND/OR gates, NAND/NOR gates, flip-flops, registers and counters. Encading, decading, multiplexing and demultiplexing are mare advanced subjects in this course. The oscillascope and logic probe are discussed and used in the lab.

ELCT506 **Digitol Circuits Laboratory**

This partian af the program provides the student with hands-an training in the various measurements made an digital circuits. Use af the oscillascope and the logic probe is stressed. The course begins with simple gate logic and intraduces mare complex counters and register circuitry.

ELCT507 **Semiconductor Fundomentals ond Circuits**

The student is intraduced to semiconductars through simple atomic theary based an the PN junctian af a diode. Diode characteristics and applicatians are cavered. Power supply circuits, including half-wave and full-wave rectifiers as well as filters, and regulators are discussed. Transistars and ap amps are introduced together with their amplifier canfiguratians.

ELCT508 **Semicanductor Circuits Lobaratory**

Testing af power supplies and semicanductar amplifier circuits are the mainstay af this course. Interpreting transistar data sheets and diade specifications enables the student to make substitutians in repair applicatians. Proper use af the oscillascope and multimeter in amplifier measurements is stressed.

ELCT509 **Possive Circuit Analysis (Applied Moth)**

This course cavers scientific natatian, units and dimensians, Ohm's law, Kirchaff's law, exponents, trig functians (Sine, Cas, Tan), vectar analysis as it applies to AC circuits, and logarithms and their applicatians.

ELCT510 **Linear Circuit Applications**

The student is intraduce to the cancepts af voltage gain, current gain and power gain beginning with simple transistar amplifiers and progressing inta power amplifiers and aperational amplifiers.

ELCT511 **Lineor Circuits Laboratory**

This practical course is tought in parallel with the theary partian, ELCT510. Using the multimeter, signal generatar and oscillascape, the student is exposed to the camman amplifier measurements af gain and frequency response.

ELCT512 **AM-FM Stereo Fundomentols ond Circuits**

A qualitative description af how information is madulated an a carrier in Amplitude Madulation (AM) and Frequency Madulation (FM) prepares the student for further training an radios and television receivers. Terms such as madulation index, carrier, aver-madulation, bandwidth and guard-band are graphically explained.

ELCT513 **AM-FM Stereo Radio Circuits Laboratory**

Measurements an AM/FM receivers using specialized RF and sweep generators help the student understand the principles discussed in the theory partian af the caurse ELCT512. Proper alignment pracedures and troubleshaating techniques are included.

ELCT518 **Television System Intraduction ond Lobaratory**

Beginning with an intraduction to black-and-white television, the student gains insight inta video generation and processing. Basic television blacks such as video amplifiers sync, and AGC and sweep/deflection circuits are analyzed. Properties af calar, calar cameras, and encading and decading calar information are cavered in depth.

ELCT519 **Active Circuit Analysis (Applied Moth)**

Construction and interpretatian af graphs far frequency response and transfer response af various circuitry is stressed. Filters, voltage regulation, transistars and amplifiers are same af the circuits analyzed. Measurement af bandwith, decibel gain and loss as well as Q are calculations that are included.

ELCT521 **Microcomputer Fundomentals**

The architecture af a typical microcamputer is studied, with a facus an the purpase and characteristics af the microprocessar with its registers and timing cycles, Read Only Memary (ROM), Random Access Memary (RAM), input, output, and device addressing. Hands-an machine language programming is intraduced to give the student insight inta computer functians.

ELCT524 **Microcomputer Laboratory**

Students get hands-an experience operating, programming, and interfacing a simple microcamputer. The programs are developed as modules for tasks such as data manipulatian, table access, speed matching, timing, pulse generatian, I/O control and code conversian. Several interfaces are constructed, progressing from simple I/O ta duty cycle power control ta video terminal interfacing.

ELCT532 **Introduction to Computer System Software**

The student is intraduced to the basic camputer disk operatian system (DOS) and learns haw to run programs, format disks, capy disks and perfarm rudimentary DOS functians. This knawledge is used to supplement basic electronics training by acquainting students with certain electronic software packages designed to help technicians to understand electronic circuit operatians.

ELCT536A **Microcamputers in Office Systems**

The persanal microcamputer is investigated as a complete system. The performance and configuratian characteristics af boards (XT AT 386/486), video displays, controllers, printers, flappy disk drive controllers, and hard disk drive cantrollers, are evaluated. Applicable diagnastic software is used far troubleshaating and evaluating system performance.

ELCT537A **Advanced Computer System Software**

Advanced operating system cancepts and techniques are introduced such as: batch files; configuratian files; device drivers; extended/expanded memary; file campression and back-up procedures. Application programs and the Windows environment are demanstrated. Use af diagnastic software and its interpretatian is emphasised.

ELCT538 **Advanced Interfacing**

Complex interfacing techniques are introduced and applied to analog-to-digital and digital-to-analog converters, multiplexed displays, and keyboard scanners and encaders. The cancepts, advantages and campanent requirements af serial interfacing are studied and applied to the interfacing af a video terminal ta the microcamputer. The principles af video displays far personal campulers will be intraduced and applied to the use af a PC as a video terminal. The minimum software for testing the interfaces is emphasized.

ELCT539 **PC Systems Lab**

This lab includes hands-an training in assembling, configuring, maintaining and troubleshooting personal computers and related peripherals such as printers, disk drives, video monitors and keyboards. Serial interface cards and modems will be configured to allow PC-ta-PC communicatian.

ELCT539A **Introduction to Data Communicatians**

Synchranous and asynchranous protacals are discussed. Various network configuratians are intraduced from a black diagram approach. Emphasis is placed an simple camputer ta camputer communicatians through a madem with its associated communicatians software.

ELCT540
See ELCT539

ELCT542 **Video Tape Recorder and Camera Theory**

Basic video recording and play-back is examined. The principles af magnetic recording, the various formats, tape transport and various processing circuits are described and applied to bath video cameras and VCRs.

ELCT543 **NTCS Transmission ond Stondords**

The NTCS standard is the anly television standard in use in North America. The features and drawbacks af this system are the facus af this course. Bandwidth allacatians, allacation schemes and calar transmissian standards will help the student understand same af the particular circuitry in the television/VCR products.

ELCT544 **NTCS Processing Circuits**

Once the student understands the rationale af the NTCS standards (ELCT543), the specialized circuitry used to process the information will make sense. In particular, the chroma decading circuitry and synchranizing circuitry are further examined.

ELCT545 **Video Tape Recorder Lobaratory**

The internal mechanisms af the VCR are examined in the lab. Measurement af the performance af the VCR and camparisons to the specifications provide valuable background for VCR repair. Typical adjustments/alignments are experienced along with some af the more specialized tools and test equipment needed far the jab.

ELCT595 **Principles of Interfocing**

The fundamental requirements and campanents af simple interfaces are intraduced, allawing the student to canstruct and test interfaces so that the camputer can input information from switches and sensars and output information to LEDs and seven-segment displays using pulled I/O. Methods af program interrupt and their advantages are applied to typical situations such as "real time" keeping. Parallel interface ICs are introduced and used to interface relays, SCRs and TRIACs ta the microcamputer. The basic software required to test the interfaces is stressed.

ELDR112 **Drofting I**

This course cavers drafting affice pracedures, lettering, use af instruments, line wark, metric and imperial scales, arthagraphic projection, pictarial drawings, electrical and electronic symbals and simple schematic diagrams.

ELDR112A **Basic Drofting ond Blueprint Reoding**

Drafting affice pracedures, lettering, linewark, use af drafting instruments, metric and imperial scales, dimensioning, arthagraphic projection, pictarial drawings. Architectural, mechanical services and electrical wiring symbals. Interpretatian af architectural, mechanical and electrical drawings showing residential, commercial and industrial installatians.

ELDR128 **Electricol Drofting II ond Blueprint Reoding**

This course cavers matar control symbals, manual starters for D.C. matars, two and three wire control, use af relays in automatic D.C. matar starters, farward and reverse control af D.C. matars, acceleratian schemes for D.C. matars, wiring diagrams, architectural symbals, mechanical services symbals, electrical wiring symbals. Interpretatian af architectural, mechanical and electrical drawings showing commercial and industrial installatians will be taken up.

EDR231 **Electrical Drofting III**

This course cavers single line diagram symbals, single line power distribution diagrams; three line power distribution diagrams; metering circuits using instrument transformers; electrical layout drawings for matar circuits and power distribution circuits; equipment selection from manufacturers catalogues; starting schemes for A.C. matars; reversing starters, reduced voltage starters, wound rotor matar starters; wiring diagram to schematary diagram conversians; intraduction to computer aided drafting.

EDR235 **Electrocl Drofting V**

This course cavers layout drawings for transformer substatians; pratection relaying schemes; metering schemes; grounding drawings, computer aided drafting.

ELDR355 **Electrocl Drofting VI**

This course cavers development af control schematics for matar control systems invalving interlacking, sequence control, time delay and forward reverse control for A.C. matars using relay logic; logic diagrams and solid state matar control circuits; computer aided drafting and design.

ELEC001 **English ond Communicotions**

The resumé and jab searching techniques, jab interviews and letters af application are cavered. Intraduction to technical writing and methads af information retrieval. Writing exercises include instructians, memas, short reparts and letters describing pracedures and mechanisms. Optian from the following topics: effective supervisian, computer impacts an society, language review, industrial/labour relations.

ELECT001 **Business Mathemotics**

This course provides an intraduction to basic mathematics including arithmetic, algebra, percents, and statistical ratios and includes an understanding af business discounts, grass profit, simple interest and discount calculations, instalment payment plans and compaund interest.

ELECT120 **Longuoge ond Communicotions and Resumé Preparotion**

The first semester English course emphasizes basic skills in written communicatian. The emphasis is an improvement in sentences, paragraphs, essays and vacabulary. Grammar and syntax are reviewed where necessary. Resumés are also prepared. Second semester includes a substantial section an aral communicatian. Also included are letters and reparts.

ELECT120 **Communicotions - 4th Semester**

The student chooses from among the following seven General Education Courses: EC106 Economics; LAW110 Contract Law; MARK112 Marketing; UBS105 History af War Part 1; UBS110 History af War Part 2; UBS115 Media Studies; UBS120 Critical Thinking; OR both UBS125 Going Human: Self, Society and Meaning, Part 1 and UBS130 Being Human: Self, Society and Meaning, Part 2. Students who select UBS125 are automatically placed in UBS130 for the second half af the semester.

ELECT170 **Longuoge ond Communicotions II**

This course cavers: camparisan and contrast methads; technical English; aral presentatians; business writing; information reparts and technical reparts.

ELS106 **Longuoge ond Communicotions**

This course sets aut to strengthen the student's grammatical and writing skills. Various farms af report and memo writing will be examined, including preparatian af aral presentation. Report writing is further explored in a second-semester course.

ELS107 **English Bosics for Community Workers**

Clear communicatian is essential to community wark. In this course, students learn to present their ideas and to improve their written English.

ELS117 **Longuoge ond Communicotions**

This course is designed to help students develap effective written and aral communicatian skills. The basics af English are reviewed.

ELS119 **Communicotions**

This course focuses an improving language and communicatian skills to meet the challenges af an E.C.E. professional. The student will develop and practice skills using a wide range af relevant resaurce materials, including articles, videas, films and children's literature.

ELS121 **English Skills**

This full semester course is designed to strengthen language and communicatian skills in reading camprehensian, active listening techniques, effective speaking/presentatian skills and practical jab-related writing. The course also includes a review af grammar, spelling and language usage.

ELS123
See AP113

ELS124 **Science Fiction**

The creation of literature, film, and television provide imaginative projections into the future. In doing so, they raise questions: What is reality, and whase reality is it? What are the implications af modern technological inventions, virtual reality, cybernetics and artificial intelligence? The course examines these questions and other popular themes in science fiction and discusses how these narratives reflect an us and an aur society.

ELS126 **Speoking with Confidence**

This course is designed to help the student with strategies which will enhance and develap aral presentatian skills.

ELS161 **Introduction to Journolism**

This course has both hands-an and theoretical campanents. It cavers the steps invalved in the research, writing and editing af an article for publicatian. As well, the course examines journalism in the social context, including history af journalism, ethics, media and culture and other issues the class deems topical.

ELS162 **Canadion Literoture**

Canada has truly became a multi-cultural nation during this last generatian. In this course we shall consider the problems, needs and hopes of the many cultural, racial and religious groups in Canada through a variety af short stories. Key themes in the course will be immigrants' experience, racism and ethnic diversity in Canada today.

ELS164 **Reoding Effectively**
See COMM130

ELT366 **Research Assignment**
See EL366

ELT514 **Power Plant Electricity**

This course offers a broad introduction to electricity. The student will study the safety aspects af electricity; the generatian af electricity; the types af electrical wires; series, parallel, and combinatian circuits; the construction and testing af electrical circuits; and electrical wiring diagrams.

ELT106 **TV Principles ond Circuits**

Basic concepts and fundamentals af theory; introduction to commercial receivers; introduction to fundamental concepts af TV, signal development and terminalagy far transmissian and reception are discussed. Included is detailed analysis af TV receivers in both the discreet black diagram and circuit analysis in black and white perspective as analysis af calaur TV signal transmissian and reception using the black diagram and IC circuit analysis.

ELT130 **Externolly Powered Prosthetics ond Orthotics Rehobilitotion Technology**

This one semester caurse (13 week) will expase the student to a wide-variety af topics relating to the application af electronics to the field af Prasthetics and Orthatics. The course will intraduce the student to a variety af industrial taptics and basic skills and lead to more specialized topics having direct applicatians to the field af Prasthetics and Orthatics. The course will cansist af lectures, demanstrations and labs

ELT144 **AM/FM Receivers**

This course cavers basic concepts and fundamentals af theory; introduction to commercial receivers, introduction to fundamental concepts af AM transmissian and detailed analysis af AM receivers including IC receivers and AM stereo receivers. A study af FM fundamental concepts and transmissian and detailed analysis af FM manaural and stereo receivers leads into synthesized receivers.

ELT148 **Semiconductor Principles ond Circuits**

The student is introduced to the basic semiconductar theories underlying components such as diodes and transistars. The applicatians af these devices in power supply rectifiers and regulatars as well as simple transistar amplifiers are cavered.

ELT149 **Advonced Transistors**

This course guides the student through various configuratians af transistars (CE, CB, CC), cascaded amplifiers, transformer-coupled and tuned transformer-less power amplifiers, load lines, distartion, Darlingtan amplifiers, negative feedback, differential amplifiers and aperational amplifiers.

ELT150 **Logic Systems**

Beginning with the basic digital building blocks af devices such as AND/OR, NAND/NOR, and Boolean algebra, the student gains experience in both applicatians and design. Flip-flaps, counters, registers, multiplexers, demultiplexers, decoders, encoders, and LED displays are analyzed. TTL, CMOS and PAL logic devices are intraduced.

ELTC151 **Electronic Laboratory**

By balancing the measurements af prepared circuits and student designed circuits, the aspects af applying measurements previously learned (i.e., frequency response) the student is guided through troubleshaating and performance testing various semiconductar circuits.

ELTC160 **Introduction to Electronics**

This beginning course intraduces the student to basic electronic terms and units such as volts, amps, ahms and direct current (DC). Circuit analysis af simple series, parallel and series-parallel cambinations are cavered. Thevenin's, Norton's and superpasition theorems are intraduced.

ELTC161 **Logic Circuits**

The various numbering systems, including decimal, actal, binary and hexadecimal, are the beginning campanent af learning logic systems. Concepts af fundamental gate and Boolean logic are discussed at a basic level. Exposure to devices such as AND/OR, NAND/NOR, flip-flops, registers, counters, multiplexers, and demultiplexers, provided a well-rounded base for students.

ELTC162 **Electrocl Fundomentols-Advonced**

The underlying theary af capacitance and inductance in DC applicatians is intraduced. Time constant circuitry and calculatians are cavered in detail. Basic generatian af alternating current (AC) is described as well as how and why it is used in damestic applicatians. Electrical safety is discussed.

ELTC163 **Electronic Laboratory**

This course ties in the practical applicatians and measurements with the theary taught in ELTC160, 161 and 164. Beginning with the proper use af the multimeter, the student is guided through the various measurements using ahmmeters, ammeters, oscillascopes, power supplies and signal generatars.

ELTC164 **Impedance, Resonance ond Filters**

The student will learn the use af capacitars and inductars in AC circuits along with circuit calculatians. Inductive and capacitive reactances as well as impedance calculatians are cavered. The student will learn to predict the response af reactances in filters and resanant circuits.

ELTC165 **Introduction to Amplifier Systems**

Beginning with the basic definitian af an amplifier system, the student is guided through the cancepts af voltage, current and power gain. Using the aperational amplifier as the basic building black, the student is shawn haw an amplifier system is put together and functians. This section prepares the student far the mare in-depth study af semicanductars in ELTC166.

ELTC166 **Applied Amplifier Systems**

Utilizing the cancepts intraduced in the prerequisite caurse ELTC165, the student is shawn the details af haw a semicanductar device can be made to amplify a signal. The various canfiguratians af the transistar are discussed and analyzed. Power amplifiers and the classes af amplifiers raund off the information cavered in this wide area af study.

ELTC167
See ELTC170

ELTC170 **Electronic Laboratory**

Used as a supplement to the second-semester causes ELTC165, 166 and 166, this is a hands-an lab caurse designed to demanstrate how the various devices read in practical circuits. Measurements using the multimeter, oscillascope and logic probes give the student experience at using these instruments far troubleshaating.

ELTC203A **Computer Aided Design**

This course intraduces the student with no previous computer experience to computers and computer literacy through intraduction to DOS; Breadboard, an electronic circuit modelling program, and framework spreadsheets. The student is guided by hands-an examples of electronic theory related to caurse wark.

ELTC203B **Computer Aided Design**

This course explains and demanstrates the major features af MICRO-CAP®, and electronic circuit analysis program that continues where Breadboard leaves off. Same af the electronic circuits simulated include: half and full wave rectifiers and transistar amplifiers including frequency response, high and law pass filters and aperational amplifiers.

ELTC203C **Computer Aided Design**

This course looks at programming in C, and cavers the seven basic elements af programming: input, autput, data types, aperations, conditional executian, laops and subrautines. The student will write, compile and run short programs. Structured programming is explained and pramated.

ELTC203D **Computer Aided Design**
The course is centred around Smartworks, a program for creating single and double-side printed circuit boards. The student is shown how to design, and the production of the Printed Circuit (PC) board is promoted. The difference between bit-mapped and vectored graphics will be explained and demanstrated. Some of the more advanced features of Framework will also be tought.

ELTC203E **Computer Aided Design**
Specialized CAD programs such as MICRO CAPIV and Assembers/debuggers are used in the theory portion of the courses in this semester. These programs speed up the development of the various designs given as assignments.

ELTC203F **Computer Aided Design**
The student is introduced to abject oriented programming through the use of the C++ language. The intent is to demanstrate to the student the interaction between software and hardware.

ELTC208 **Waveshaping Circuits**
Beginning with a review of how capacitors and inductors behave in DC circuits, the student analyzes time constant circuits. Applications of time circuits are investigated. Miller integrators, differentiator, clippers, clampers, Schmitt triggers and comparators are covered in detail. Multivibrators and the 555 timer applications are used to demanstrate basic principles.

ELTC213 **Communication Principles**
This course covers advanced theory and mathematical analysis of the AM/FM waveform. Topics include single sideband (SSB) transmission, multiplier stages, alignment of transceivers, VSWR and measurements, all-band AM receivers, SSB operation including balanced bridge modulators and SSB filters, transceiver block diagram and schematic diagrams and FM synthesized transceiver block diagram and schematic.

ELTC214 **Communication Specialty**
The student is given maximum exposure to the various equipment and test modes for the communications field. Theory and measurements of Klystrons, fibre optics, transmission lines and telecommunications systems are presented. In particular, topics such as Smith charts, fibre optic measurements and repairs, spectrum analysis, Frequency Division Multiplexing (FDM), Time Division Multiplexing (TDM) and microwave transmission are covered extensively.

ELTC216 **Computer Specialty**
In this course, the student experiences the problem with interfacing to printers, disk drives and video boards. The basic architecture of the Intel-based personal computers, the XT, 286 and 386 systems, is discussed. An exploration of the hardware through the use of the DOS DEBUG program is included.

ELTC230 **Waveshaping and Control Devices**
Basic concepts and fundamental theory form an introduction to waveshapes and their integration, differentiation and analysis; analysis and design of diode-clippers/clampers, 555 timers in monostable/astable modes; and linear sweep generators using discreet and ICs such as operational amplifiers including function generators.

ELTC231 **Semicandutor Devices**
This course continues the technologists' training in the various semiconductors. FET, MOSFET (and amplifiers), UJT, PUT, SCS, SCR, DIAC, TRIAC, laser diodes and the principles of photo-activated semiconductors are covered.

ELTC232 **AM/FM Technology**
This course covers the principles of AM and FM modulation and transmission with a detailed study of AM and FM receivers. Topics included are oscillators; amplitude modulation theory and transmission; TRF and superheat receivers; principles of frequency modulation, FM receivers; stereo broadcasting and stereo receivers; synthesized receivers.

ELTC233 **Electranic Laboratory**
Transistor and operational amplifier circuits as well as digital circuits are designed, set up and analyzed using oscilloscopes and/or logic probes.

ELTC236 **Communications Technology Part I**
This subject covers the theory, design and operation of transmitters and receivers for analog communicatons. Topics included are; oscillators; synthesized tuning; amplitude modulation (AM) methods and measurements; Class C amplifiers; transmitters and receivers using AM, single sideband, frequency and phase modulation; signal-to-noise ratio.

ELTC237 **Operational Amplifier Design**
This subject covers the properties and applications of the OP AMP with emphasis on design. Topics included are: basic, summing, instrumentation and programmable gain amplifiers; comparators; limiters; integrators/differentiators; lead and lag compensation; active filter design; computer models; waveform generation.

ELTC239 **Electranics Laboratory**
This course balances the theory tought during this semester in Operational Amplifiers, Communications and Computer Technology with hands-on practice involving measurements using the basic oscilloscope and specialized test equipment such as sweep generators and logic analyzers. Many of the labs are design-oriented to graphically demanstrate the theories covered in the class.

ELTC241 **Camputer Technology I**
Beginning with the basic microcamputer architecture the student is led through both the hardware and software requirements of a microcamputer. The emphasis is on using the micro to solve problems through either software or hardware design approaches. Basic interface considerations and address decoder design is covered in depth.

ELTC242 **Micraprocessars and Systems Applicathans**
This course introduces microprocessor systems. A balance between software and hardwre is attained, providing the student with the necessary knowledge to discern between hardware and software problems. Motorola 6800 machine language programming and circuit tracing and analysis are covered.

ELTC243 **Analog/Digital Interfacing**
The student is shown how the basic microcomputer covered in ELTC242 can be used to interface with the real world. Keyboard and display interfaces and various analog interfaces are examined. Applications of how the microcamputer can measure and control some processes are explored.

ELTC244 **Electranic Laboratory**
The labs in this course give the student maximum exposure to the applications of the circuits covered in theory. In some cases, the student designs and constructs circuit boards. Advanced measurement techniques are stressed.

ELTC245 **Electranic Laboratory**
Used as a practical back-up for the theory subjects in the fourth semester, this course gives the student a wide and varied exposure to equipment used in the field. Advanced measurement techniques, specialized test equipment and specific measurement protocols are presented.

ELTC299 **Technical Report**
As a requirement for graduation technicians are required to research and write a minimum 3000-word report on some application or aspect of electronics not covered in theory. This will help the student cope with those times in industry when little information is available to help solve a problem.

ELTC301 **Communications Technalagy Part II**
This course provides basic theory and operational kills and hands-an experience of equipment available in the laboratory such as Klystron; spectrum analyzer both for AM and FM; and fibre optics, basing and test measurements using the optical time domain reflectometer. In-depth analysis of wave theory for coaxial cables, CAD of cooxial analysis, reflective coefficient measurement and VSWR using wave guides and frequency division multiplexing for base band transmission using the Granger unit are also covered.

ELTC303 **Automatic Cantrals Systems**
Using the Laplace transform as a practical analytical tool, the student is shown how closed loop systems can be mathematically modelled. The operational amplifier is the target for most of the course. However, microcamputer control is also explored. Terms such as stability, critical damping and system order are defined.

ELTC312 **Electranic Laboratory**
Microwave and fibre-optic measurements as well as transmitter alignments are studied. Design of I/O interfaces is included.

ELTC316 **Labaratory**
This course is the lab portion of the Automatic Controls course. The student designs and examines the response of various closed loop operational amplifier systems. Both the aspects of testing and troubleshooting closed loop systems are experienced.

ELTC320 **System Design I**
The student, by designing a product, is introduced to both the hands-on design of hardware/software and project management. Discussions of component selection, reliability and design pitfalls broaden the student's experience. Inventory control, costing, team-work and time management are specific objectives in this course.

ELTC321 **System Design II**
In this continuation of ELTC320, the student continues his/her design project. The development of complex circuit boards and layout techniques are discussed. Consolidation of the project into a finished product is the main goal in this section. Management philosophies and marketing strategies are also discussed.

ELTC322 **Camputer Technalagy II**
Interfacing to various I/O devices is the subject of this course. The hardware and design of display devices such as LED and video outputs are examined. Parallel and serial I/O is covered. RS232C and Centronics are two standards covered in detail.

ELTC399 **Electranic Technalagy Report**
An in-depth report covering some aspect of system design is required to be campleted by all Engineering Technology students. In most cases, this report will be tied into a project design which the student will be assigned.

ENA170 **Enamelling I**
This course deals with behaviour of materials as applied to enamelling, including: theory of enamelling; techniques and practical application; basic projects designed by students; application of colour, firing, and safety procedures. Toxicity of materials and proper handling are also covered.

ENA180 **Enamelling II**
The student is tought the principles of cloisonné and champlevé techniques. Each student designs a project and practices the above techniques under close supervision.

ENDR105 **Camputers in Engineering - Applications I**
This course is designed to introduce the student to the following areas: introduction to MicroSoft disk operating system; introduction to computer aided design drafting; wordprocessing basics using WordPerfect.

ENDR106 **Engineering Design - Theory I**
This course is designed to give the student an understanding of conventional drafting standards and principles. The standards will then be applied by the student to create engineering drawings of various mechanical details using drafting equipment and instruments. The course will include the following topics: alphabet lines; geometric construction; lettering; freehand sketching and sketching; title block and notes; orthographic multi-view projection; pictorial drawings; threaded fasteners; sections and conventions; machine operations; standard fits and limits.

ENDR114 **Basic Machine Shop - Drawing and Sketching**
The Drawing and Sketching portion of the course will concentrate on drawing and sketching skills which relate to the realistic requirements of daily technical work in the Orthotic and Prosthetic field. The Machine Shop portion of the course will cover hand and power tool usage. Safety and maintenance will be tought through a combination of classroom instruction, assigned readings, and hands-on practice in the shop.

ENDR122 **Camputer in Engineering Applicathans II**
This course is a follow up to Camputer in Engineering Applications I and focuses on more advanced applicathons. This course will cover the following areas: computer numerical control manual programming; micro computer system management; computer aided design drafting using AutoCad; basic introduction to SmartCam.

ENDR123 **Machining Fundamentals II**
This course is a follow up to Machining Fundamentals and focuses on more complex manufacturing processes than the former course. This will cover the following topics: measurement techniques; thread forms; clamping devices; metal classifications; heat treatments; jig boring equipment; rotary tables; metal cutting practices; cams and gears; indexing; coolants; other manufacturing.

ENDR204 **Jig and Fixture Design I**
Students review drafting and production methods and are introduced to: locating and printing principles; standardization of jig and fixture components; design of a drill jig, milling fixture and gauge; high valume production; port analysis; technology of sheet-metal presswork; theory of cutting; and the design of pierce and blanking die, compound die and progressive die.

ENDR205 **Jig and Fixture Making**
The student becomes knowledgeable and efficient in the following toolmaking principles: planing, layout and construction of simple gauges, tooling, jigs and fixtures; ordering standard parts from catalogues; building simple tools from sketches; constructing a drill jig using a jig boring machine; standard jig bushings and gauging pins; repairing and modifying gauges, tools, jigs, fixtures etc.; selecting proper metals and materials to construct tools applying metallurgical heat treatment principles to items as needed.

ENDR206 **Computer Aided Manufacturing II**
The student will build practical experience on a theoretical base and develop computer numerical control techniques in a series of controlled steps moving from basic three dimensional C.N.C. programming and machine operation to the operation of multi-axis machining centres and computer assisted part programming. Subjects covered are: review of part programming functions; programming setup sheets and operator reports; introduction to C.N.C. and types and uses of C.N.C. systems.

ENDR207 **Jig and Taal Design 1**
This course covers manufacturing engineering organization; cutting tool design; form tools; process planning; turret lathe; tooling layouts; automatic lathes; location and clamping theory; drill jig and fixtures principles; brooch design; gauges; presswork and tooling economics.

ENDR216 **Camputer Aided Manufacturing III**
The subjects covered during the course are as follows: review of Camputer Assisted Tool Programming (APT); advanced structure (loops etc.); camputer assisted manufacturing techniques; camputer commands and terminal operation; program documentation; advanced geometry definitions; complex index and macro definitions; multiple branching technique; looping logic; surfaces and matrices.

ENDR217 **Jig and Taal Design II**
Covered are: principles of metal cutting and tool life; effects of various types variation on component production; fixture assembly jig setups; two and tree axis numerical control machine tools; automation design and the use of industrial robots; studies in the techniques of tool making and quality control and an analysis of machine tool operations (jog boring, gear shaping, gear hobbing and broaching); estimating and processing complex components using various manufacturing techniques; assembly of multiple parts by various means; plastic tooling; press-tool dies, types of construction, calculations and applications.

ENDR223 **Die Design I**
After completing the course, student will be able to develop theoretical and practical skills required in the design of mare advanced metal-cutting dies, bending and forming dies with emphasis on determining allowances and blank development. They will also gain an understanding and application of modular tooling and design dies that are safe and cost effective and design quality tooling.

ENDR243 **Tool Design Concepts**
This course continues to develop drafting/design ability by concentrating on dimensioning, tolerancing, and design techniques of basic jigs, fixtures and dies. Tools and dies designed by the student is the integration of theoretical fundamentals and practical drafting skills at the student's level of study.

ENDR341 **Machine Design I**
This course is designed to introduce the student to the integration of fundamentals of technology. The student is given basic design data, and with the use of engineering catalogues, will produce layout and design functional mechanical assembly/detail drawings. An engineering report, based on research, will be considered by the student to appropriate standards. With the introduction of control technology, the student will develop theoretical and practical knowledge for industrial automation.

ENDR347 **Theary af Machines I**
Covered are: cam layout and displacement diagrams, cam and follower types, uniform velocity and acceleration motion and S.H.M.; simple and compound gear trains, epicyclic gear trains (including reverted, bevel and differential types); torque, power and mechanical advantage; static and dynamic force analysis in simple mechanisms by graphical method, inertia forces, shaking force; dynamically equivalent systems, centre of percussion.

ENDR348 **Camputer Aided Design I**
The student continues to develop learning in advanced features of AutoCAD. Areas covered include 3D, Autolist, tablet, and menu customization.

ENDR351
See ENDR341

ENDR356 **Camputer Aided Design III**
After initial introductions and theory lectures the student will follow an individually paced program, in the form of module projects using AutoCad software, designed to highlight the course content which is as follows: introduction to micracamputers; basic DOS commands and options; types and uses of C.A.D. systems; basic construction functions, manipulation of two dimensional geometry; advanced two dimensional curves; blocks; display commands; plotting engineering drawings; file management and utilities.

ENDR357 **Theary af Machines II**
Flywheel design and applications; governar types, force analysis and applications; static and dynamic balance of rotating masses; balance of reciprocating masses; cantinuan balance of single cylinder engine; balancing machines, function and application; multi-cylinder engine balance by rotating vectors; gyroscopic forces and design applications; critical speeds of shafts, including single disc, multi disc and uniform shaft cambinations.

ENDR363 **Camputer Aided Design IV**
Camputer-aided 2D drawing and advanced 3D design and editing using UNIX-based ICEM software, ANSI drafting standards, 2D drafting geometry, co-ardinate input options, graphic primitives, entity selection and constraints, properties and level management, function and hot keys, editing commands, entity manipulation, dimensions and annotation, display control, multiple views, file management, co-ardinate systems; wire frame models, hidden lines, 3D curves, surface creation and trimming.

ENG105 **Communications - Creative Fashion**
This course will help the student develop and practice the effective language and communication skills required for success in the fashion industry. The student will learn active listening techniques, effective speaking/presentation skills and business writing formats. The course also includes a review of grammar, spelling and sentence structure.

ENG107 **Language and Communications**
This course introduces students to essential communication skills and stresses listening and note taking. It also introduces students to the basic principles of business communications and applies these principles to the job search process. Resumé preparation, cover letters and interview techniques provide a significant component of this course's objectives.

ENG124 **English for Court Reporting I**
This course gives a thorough review of grammar: parts of speech, types of sentences, clauses and phrases, application of grammatical principles, and grammatical terminology. It also covers some marks of punctuation: closure marks, the semicolon, the colon and the dash.

ENG125 **English for Court Reparting II**
This course covers the uses and rules of all marks of punctuation. Practice in proofreading for spelling, grammar and punctuation is also given. Some oral communication is done as well.

ENG129 **Fashian Management - Organizatianal Behaviour**
This course provides an introduction to organizational behaviour with an emphasis on management styles and trends, leadership and motivation and creative problem solving. Lectures, case studies, small group work, role plays and presentations will be used.

ENG139
See ENG107

ENG149 **Language and Communication II**
This course builds on skills acquired in ENG139 by continuing exploration of various forms and strategies of business communication as related to the hospitality industry. Students will also complete an industry related research project which will demonstrate their capacity to research and communicate relevant information in an appropriate manner.

ENG153
See ENG340

ENG161 **Language and Cammunications**
This course is designed to assist the student in developing or improving basic writing and essay-writing skills, critical and analytical skills, research skills and oral presentation skills. Course work will be primarily based on material from a novel and a film. Audio-visual material, group work, student simulations and brief lectures will all be used as format for class work.

ENG165 **Report Writing**
This course develops and refines the student's report-writing skills. Several minor in-class reports will be written in response to audio-visual material and student-presented scenarios. In addition, the student will explore and report, both orally and in written form, on how language is used to describe gender in contemporary culture. The major project of the term is an evaluative agency report. The student first develops the "instrument of study", then uses it to collect information about an organization appropriate to the field of study.

ENG202 **English**
This course introduces students to oral and written skills with emphasis on communicating with patients in a dental setting. Job search skills are essential in this program

ENG203 **Technical Communications**
Written and oral communications for the furniture industry. This course includes memo, letter and report writing on computers, research and job search techniques as well as various oral exercises.

ENG205
This course builds upon the skills learned in COMM120. By writing a technical report, students will learn the mechanics at report-writing as well as gain a better understanding of research techniques. An oral presentation and a job search unit will also be important components of this course.

ENG211 **Latin I**
This course covers Latin words and phrases formerly used in legal documents and court procedures.

ENG212 **Latin II**
This course continues Latin I.

ENG216 **English and the Legal World I**
This course reviews the rules and applications of punctuation specifically related to verbatim transcripts. Proofreading from transcripts, articles, texts and other relevant sources will also be covered.

ENG217 **English and the Legal World II**
A continuation of the punctuation review for court reporters, with special emphasis on figures, abbreviations and capitalization. The paragraphing of transcripts will be covered. Students will work with jury charges, cross-examinations, and related material.

ENG218 **English far Court Reparters**
Students will continue with punctuation of transcripts. In addition, students will review appropriate material in preparation for the general knowledge test administered by the Chartered Shorthand Reporters' Association.

ENG255 **Technical Report**
The student will write a 2,500 word report on some piece of electrical or industrial electronic equipment or circuit. Information is to be obtained from the available technical magazines and books in the reference section of the Toronto Public Library system.

ENG304A **Technalagical Thesis**
This course covers: formal report writing; production of a technological thesis; review of summarizing, paraphrasing and direct quoting; documenting sources (endnoting vs footnoting); incorporating graphic and visual aids in a report; draft preparation; proofreading; and oral brief on thesis findings.

ENG304B **Technalagical Thesis**
Reaction and oral presentation of a complete technological thesis. This report is to present some original computations on a chosen topic and is to demonstrate the student's ability to research a topic and use analytical skills to solve specific problems encountered during the research phase of the project.

ENG310 **Language and Communications**
Covered are: sources of technical information; evaluation of trade journals; letter writing to government and industry; communication in building practice; analyzing reports; systems of organization in report writing; formal for scientific bibliographies; source crediting; use of computer data bases; formal report writing; summarizing, paraphrasing and direct quoting; documenting sources (endnoting vs. footnoting); graphic and visual aids in reports; draft preparation; proofreading; oral brief on report findings; and technical thesis.

ENG402 **Communications and Business English II**
The principles of formal business report writing, business letters, and resumé formats, and the practice of effective communication are expanded in this course.

ENG501 **Language and Communication**
This course introduces students to essential communication skills and applies them to the job search process by focusing on cover letters, resumé preparation, interview techniques.

ENG502 **Language and Communication**
This course builds on skills acquired in ENG501 and focuses on research techniques and oral communication. Students will prepare an oral presentation or demanstration on an industry related topic. This presentation will demanstrate both research and their ability to communicate effectively in front of an audience of their peers.

ENG504 Business Practices and Communications
This course covers report writing, oral presentations and job search preparation, including resumés, application forms and interview techniques.

ENG511
See ENG501

ENG513 College Start
Reading, writing, grammar and spelling skills are advanced to Grade 11. This program also includes a strong vocational planning and guidance component as well as vocational orientation. Computer literacy covers familiarity with computers, systems operations and basic word processing (WordPerfect 5.1). Study skills include library and research skills, note-taking and exam-taking techniques, and successful time management.

ENG516 English
This course improves the student's reading, writing, grammar, spelling and vocabulary skills up to Grade 6. Emphasis is placed on reading and writing skills. Both lectured and individualized approaches are used. This course is taught in either English or American Sign Language. For students taking this course in American Sign Language they would be expected to transfer meaning of written text into American Sign Language to enhance understanding.

ENG523 College Start
The skills begun in English513 are advanced to Grade 12.

ENG529 English Level 2
This course improves the student's reading, writing, grammar, spelling and vocabulary skills up to Grade 8. Emphasis is placed on reading and writing skills. Both lectured and individualized approaches are used.

ENG530 Language and Communications - Part A
A short review of run-on, fragments, commo, semicolon and colon leads to sentence structure and paragraph writing. An introduction to the business letter and memo is followed with appropriate letters and memos.

ENG530 Language and Communications - Part B
The importance of communicating in the workplace is practised with technical instructions. Job search techniques are presented, and the student will have completed the resumé, solicited and unsolicited application letter and application form. The memo report is introduced and an appropriate exercise is applied.

ENG534 English Level 3
The skills learned in English529 are advanced to Grade 10. The emphasis and approaches used are similar.

ENG539
This 20-hour course covers the memo, business letters, applying for a job and an oral report.

ENG541 Language and Communications
An introduction to the business letter and memo is followed by exercises in letters and memos. The memo report is introduced followed by an appropriate exercise. The student is presented with appropriate job search techniques and completes a resumé, a solicited and unsolicited application letter and an application form. Communicating in the workplace will be covered along with an instruction assignment. An exercise in workplace legislation will be completed.

ENG543
See ENG501

ENG552 Language and Communications I
This course includes basic grammar, listening and reading exercises, writing instructions, applying for a job and business correspondence

ENG561 Fashion Communications II
This course presents a college level approach to memo writing, various types of business letters, formal and informal reports, research skills, preparation of reports, preparation and presentation of a speech and the job search. Communication theory vital to business is emphasized and applied to each area of study.

ENG562 Language and Communication II
This course concentrates on letter writing, application forms, the resumé and covering letter and other aspects of the job search.

ENG576
See ENG501

ENG610 Basic Level
This course focuses on the skills that are required by the apprentice when dealing with other groups. These other groups consist of customers, architects, and other trade mechanics. Documentation such as purchase orders and work orders are also studied.

ENG611
See ENG501

ENG620 Intermediate Level
This course looks at those skills required for the apprentice to be successful within his or her own organization. Skills such as job search, career development and selling ideas are covered. Other topics include understanding unions, the Occupational Health and Safety Act and the Human Rights Code.

ENG630 Advanced Level
The focus of this course is topics in business administration as it applies to the mechanical trades. Topics such as how to start a business, understanding contracts and personal investments are covered. Other topics include understanding code books, WHIMS, and multiculturalism.

ENG631
See ENG502

ENG700 Language and Communication Skills
An introduction to grammar and structure, spelling, vocabulary, and reading and writing skills.

ENG710
See ENG107

ENV3600 Environmental Sciences
This course covers water quality, sources and uses, including movement of contaminants, ground-water systems and wastewater. Waste management includes site selection, sludge management, hazardous waste management, environmental planning and decision making.

EST111 Introductory Estimating
The course will teach basic estimating skills needed to establish material and labour costs. Various techniques, from unit costing to itemized material take-offs to "guestimating" will be covered.

EST207 Renovation Project Estimating
The course will build on techniques acquired in semester two. The costing principles outlined in semester two will be applied to commercial and industrial renovations. Computer applications will also be used in these areas.

EST300 Graphic Arts Estimating
This course introduces the student to estimating functions to determine costs and prices for all operations associated with paper, printing inks, lithographic plates, presswork, bindery operations, typesetting and photographic processes. The course also includes a review of the total estimating picture and a short introduction to web estimating and computer assisted estimating.

FAB100 Fabric Science
This course introduces the student to textiles, outlining the structure of the textile industry and its relationship to fashion and apparel products. It details the components of textiles, including fibres, yarns, fabric construction, colour application methods and fabric finishes applied to enhance appearance and function of fabric. The student will prepare and use a comprehensive swatch kit to demonstrate the different textiles.

FAB160 Fabrics Analysis and Laboratory
This course continues the development of skills from the first semester of textiles, detailing the aspects of colour and fabric finishes and their methods of application to create fabrics that are attractive and functional for end use. Emphasis will be put on care and renovation of textiles and textile quality assessment.

FAB200 Fabric Science
This course is the third in the fabric science series of courses designed to provide the student with the theoretical and practical knowledge necessary to test and assess textile products as they are transformed into apparel products. The course uses the textile laboratory and the specialized textile testing equipment to demonstrate and practice fabric identification and testing.

FASH107 Foshion Illustration and Design I
This course is designed to equip the student with no previous drawing skill or experience with the skills necessary to illustrate ideas for garments. The student will learn technical drawing of various pants and skirts and the details of these, including gathers, pleats and pockets. Proportions of the "fashion figure" are outlined along with construction of such details as the face. Principles of depicting "draping" of a garment on such a figure are explained.

FASH157 Foshion Illustration and Design II
This course builds on skills learned in FASH107, including the depiction of various fabric textures as tweed, knit, transparency and shiny surfaces such as sequins. The student will experiment with display layout in various forms, including newspaper advertising design and label design. Felt markers and watercolour wash are used as an illustration medium.

FASH201 Foshion Illustration and Colour
The student will produce two presentation boards depicting an evening dress and a coat. Work will also be done with logo development, costume illustration for theatre and the production of a portfolio.

FASH257 Foshian Art III (Portfolio)
This course will develop an outstanding portfolio by working with the strongest visually-oriented students. Emphasis will be on strengthening individual skills in a one-on-one setting. Prerequisite: FASH201 with an A average or above

FASH544
See FASH107

FASH554
See FASH157

FBM402 Therapeutic Diets
The student will come to understand the principles of dietary modifications and their implementation and will learn how to adopt menus to meet the dietary needs of patients.

FC104 Food, Beverage and Labour Cost Control
Because strict control of costs is essential for the survival of a hospitality business, it is imperative that students learn what cost controls are available to a manager. The emphasis in this course is on how to make these controls work. Prerequisite: PUR104 (PUR705 for Chef Training)

FC404 Operational Controls
The policies and practices required to control costs at food, labour and other expenses in food service operations are learned in this course.

FC503 Food, Beverage and Labour Cost Control
See FC104 Prerequisite: PUR505.

FCH404 Applied Food Chemistry
This course will provide students with a knowledge and understanding of the structure and composition of foods and the scientific principles involved in food preparation.

FCL703
See FC104

FIT107 Applied Exercise Techniques I
This course covers the basic components of fitness, safety guidelines and correct techniques of exercise, training techniques for flexibility, aerobic and anaerobic modes of exercise.

FIT108 Applied Exercise Techniques II
This course involves practical demonstrations and teaching of the correct techniques and safety precautions when using free weights and weight training machines. Theoretical data that pertains to strength and endurance training is also covered.

FIT111 Introduction to Fitness Testing I
The course covers human performance tests related to fitness. Practical and theoretical skills are developed in the areas of anthropometry, strength, endurance, flexibility and blood pressure. STPA certification is offered in this semester.

FIT113 Introduction to Fitness Testing II
The course covers human performance tests related to the Cardio-Vascular fitness component. Practical and theoretical skills are developed in the areas of Heart Rate Reserve, Operations of the Electracardiogram Astrond 6 Minute Bike Test, the Three Stage Bike Test.

FIT115 Exercise Class Leadership I
The course content will include the group class market; elements of a good class; performance criteria; content and exercise selection; introduction to music; planning and organization.

FIT116 Fitness Testing Clinic
This course integrates and applies practical and theoretical skills to prior comprehensive physical fitness tests. Pre-test screening, problem solving and counselling are integrated in this clinical setting. Data gathered from the assessment is calculated and categorized for the post test counselling session of the assessment.

FIT125 Exercise Class Leadership II
Builds on the skills achieved in Exercise Class Leadership by introducing more complex topics such as use of music, intensity change and progressions. The student presents a 20 minute full component fitness class to successfully complete this course.

FIT205 E.C.G. Monitoring Techniques
This course will involve theoretical information and practical experience to enable the student when given various tracings to recognize if the E.C.G. pattern is irregular.

FIT207 Program Administration Clinic I
The course is a practical internship experience which simulates a wide variety of services offered by employee fitness/wellness programs. It offers guided opportunities to utilize skills and theory from other courses. Students are scheduled to serve as a centre supervisor and on assessor/employee for part of the course. Special events and services are provided to the college and external communities through small group committee work. A weekly lecture and periodic workshops provide a theory base to this management oriented course. Prerequisite: Successful completion of Semester I and II.

FIT209 Guidelines for Exercise Prescription
This 68-hour third semester course combines the knowledge gained in the sciences of exercise physiology, functional anatomy and fitness assessment with interpersonal and counselling skills in the design of a safe and enjoyable exercise prescription. Learn specific systems of programming which emphasize cardiorespiratory and muscular conditioning, flexibility and weight loss.

FIT210 Fitness Seminars
This course combines a series of professional development seminars, field trips, guest speakers and personal consultations.

FIT212 Programming For Special Cases
This course applies previously learned training principles to the development of exercise prescriptions for special populations. Specific considerations for the design of programs during pregnancy, for older adults, cardiac patients, athletes and youth will be reviewed.

FIT213 Advanced Fitness Assessment
This 68-hour, third semester course will refine and expand the skills learned in FIT111 and FIT113. Emphasis is placed on learning new indirect submaximal and maximal aerobic assessment protocols which are suitable for a variety of populations. Judgement, counselling, and communication skills are required in the administration of such assessments. Different techniques for the measurement of body composition will be discussed and students must demonstrate competence in each of the methods.

FIT215 Exercise Class Leadership III
This 68-hour course refines all areas of study and skill achieved in FIT115 and FIT125. Students are prepared for leading a 45 minute, full component class (by studying combinations, transitions, & step) and are able to present themselves for the Ontario Fitness Leader certification within the course.

FIT217 Program Administration Clinic II
This course is a continuation of FIT207. Special events are organized and students work in committees to provide services to the centres' members.

FIT223 Advanced Fitness Assessment II
This fourth semester course continues to meet the practical requirements for the CFA. Students measure oxygen consumption directly and indirectly using various submaximal and maximal treadmill protocols. Posture flexibility, maximum endurance strength and aerobics power are measured using protocols that are specific to the demands of a particular sport or activity.

FIT225 Exercise Class Leadership IV
This 30 hour course is offered to those students who have competed FIT115, FIT125 and FIT215. It introduces the student to specialty areas of class leadership such as cardio funk, body sculpting, step circuit, theme classes and high/low choreography. Other specialty areas that deal with target populations such as pregnancy, children and seniors are addressed. Upon successful completion of the course, the student will be able to lead a 30-minute specialty class.

FLDP100 Field Practice
The student will gain experience by applying a wide range of dental assisting responsibilities in a field placement environment. Field placements include selected general and specialty private practices.

FLDP101 Field Practice I
Supervised field work is an integral part of the program. Job skills will be developed through placement in a variety of programs and facilities. Students will be required to gain experience in both institutional and community agencies. Field Practice I is a prerequisite for Field Practice II. Must be taken concurrently with Semester 1 and 2 courses.

FLDP102 Field Practice II
This course is a continuation of FLDP101.

FLDP203 Field Practice III
To be taken concurrently with Field Work Seminar III and IV. Prerequisite: FLDP101 and 102.

FLDP204 Field Practice IV
This course is a continuation of FLDP203.

FLDW101 Field Work Seminar I
Students meet weekly with faculty advisors to discuss common concerns and explore issues raised in Field Placements. The seminar provides an opportunity to integrate academic and practical learning experience in a small group. To be taken concurrently with Field Practice I & II.

FLDW102 Field Work Seminar II
This course is a continuation of FLDP101.

FLDW203 Field Work Seminar III
To be taken concurrently with Field Practice III and IV. Prerequisite: FLDW101 and 102.

FLDW204 Field Work Seminar IV
This course is a continuation of FLDW203.

FLEX200 Machine Printing Flexography
This is a basic course in the fundamental of flexographic printing. It covers safety and housekeeping, lubrication, roll feed and web tension, the printing units, services of press of air, water, gas and electrical controls, oven drying, roll rewind, circulating pump for inking systems, flexographic inks and their compatible solvents, ink viscosity measurements, rubber plates, Anilox rolls, ink metering systems, position and register, substrates, running problems and corrections.

FLEX300 Machine Printing Flexography
This is an advanced course in flexography printing on various substrates, using photopolymer and rubber plates.

FLQ101 Large Quantity Food Basic
This course trains the student to prepare large quantities, a requirement of the industry. Not only do students practice their culinary techniques, but they also develop the professional approaches required in the workplace. The Large Quantity Food course is a required component of the Cook's Apprenticeship Programme. Prerequisites: FSQ101. Recommended but not required: BKT101, MT101.

FLQ102 Large Quantity Food Advanced
This course prepares the student to work with the realities of a commercial kitchen. Through their daily preparation of a five-course meal, students experience the demands of the workplace, work as a member of a team and learn to achieve the standards of quality required by the consuming public. Prerequisites: FTC102, FSQ101 and 102, FLQ101/2, BK101 and 102.

FLQ203 Advanced International Cuisine
This course prepares the student to prepare international and ethnic cuisine; covers the culinary skills required, the commonly used ingredients, customs and culture and menu design of international cookery. Prerequisites: FTC101, FSQ101 and 102, FLQ101 and 102.

FLQ205 Food Preparation Garde Manger
In this course, the student learns how to work in one of the busiest areas of the kitchen – the cold preparation area. The student will learn to prepare, store and serve various cold food items such as salads, hors d'oeuvres and canapes.

FLQ502 Large Quantity à la Carte
See FLQ102
Prerequisites: FTC502, FSQ501, FLQ501, BK501, BK502.

FLQ502A Large Quantity à la Carte
See FLQ102
Prerequisites: FTC502, FSQ501A, FLQ501A, BK501, BK502A.

FLQ701 Large Quantity Food Basic
See FLQ101

FLQ702 Large Quantity à la Carte
See FSQ102 Prerequisites: FTC702, FSQ701 and 702, FLQ701 and 702, BK702.

FOO202 Front Office Operations
In this course, the student learns about the final two stages of the guest cycle, the service and operational tasks performed during the occupancy and departure stages. Students are introduced to the managerial function of the front office, that is, the functions of the reservation and front office manager. Prerequisite: FOP201.

FOO502 Front Office Operations
See FOO202 Prerequisite: FOP501

FOP201 Front Office Procedures
In this course, the student learns about the first two stages of the guest cycle. These are the two highest profile functions of the hotel front office, the pre-arrival and arrival stages.

FOP501 Front Office Procedures
See FOP201

FP534 Cantonese Preparation
Students learn the basics of vegetable cutting through to the more complex skill of decorative vegetable cutting. They also study types of woks, wok handling, cooking temperature control marinating of meat, poultry and seafood, the use of starches, oil, spices, the most popular sauces, and the importance of supporting ingredients. Twenty different dishes are taught.

FP535 Dim Sum Preparation
In the course, approximately 15 different varieties of Dim Sum, from Har gow to Char Sui Bow, are taught, using steaming, boiling, and deep fried cooking methods.

FP536 Chop Suey and Food Preparation
In demonstration and through hands-on preparation, students learn most of the popular Chinese restaurant dishes, including egg rolls, pineapple chicken balls, chop suey, diced chicken and almond, etc.

FP537 Sichuan (Szechuan) Preparation
Students are taught to reproduce the unique sesame taste of traditional Sichuan dishes. In addition, students will learn Sichuan Dim Sum dishes.

FP544 Cantonese Preparation
Building on skills previously acquired, the student uses different methods of cooking 20 dishes that include vegetables, especially bean cakes, fish, and shellfish, as main ingredients.

FP545 Dim Sum Preparation
In this course, the more complex and difficult items of Dim Sum such as twisted donut, custard tarts, and spicy chicken, are among the 20 dishes which students learn to make.

FP547 Sichuan (Szechuan) Preparation
In this continuation of FP537, students are taught about more complex Sichuan dishes including the Hot and Spicy, Sesame Hot, Peking Duck, Drunken Chicken, and Eight Treasures Rice.

FP548 Barbecue Preparation
In this course, the two types of Barbecue — Chop Suey and Contanese — are learned by students who produce dishes such as spare ribs, pork, chicken, duck, and whole suckling pig

FP549 Chop Suey Preparation
This course is a continuation of FP537.

FP400 Classical and Contemporary Italian Food Preparation Techniques
Throughout the program classical and contemporary Italian food styles and techniques are presented. These include developing an inventory of preparation, presentation and service techniques of savory antipasti, breads, eggs, vegetable dishes and salads.

FR100 Conversational French Beginners
Students will learn techniques to help them acquire a second language and they will develop strategies to enable them to use a basic knowledge of the language function in daily situations with native speakers.

FR101 Canversational French Intermediate
The number and kinds of communicative activities possible will be greater than in the basic level class. Simple units of French vocabulary used in the business world will be studied. The student will learn to express opinions and give instructions, and be able to tell a simple story and make a simple presentation about self, family, friends, preferences, possessions, etc. The student will be able to report on what someone else has said. Prerequisite: FR100.

FR102 Conversational French Advanced

A primarily conversational French course aimed at strengthening language and communication skills. A workbook with drills in advanced grammar is used to reinforce oral skills.

FSL502A

See FLQ102

Prerequisites: FTC101, FSQ101 and 102, FLQ101 and 102, BK101 and 102.

FSQ101 Culinary Techniques Basic

This course prepares the student for the realities of the industry. The student is introduced to many basic preparations; practices basic culinary techniques; and develops working habits required in the workplace. The Small Quantity Food course is a required component of the Cook's Apprenticeship Programme.

FSQ102 Culinary Techniques Advanced

In this course, the student adds to the repertoire of culinary skills. The student will practice these skills within the supervised setting of the demanstration lab.

FSQ203 Culinary Techniques Internatianal

This course is a detailed study of culture, climate, food products and other factors influencing ethnic and international cuisines of various countries. The student will develop the skills necessary to plan international menus, modify and adapt recipes and apply these skills to the preparation of international dishes. Prerequisites: FSQ101 and 102, FLQ102, FLQ205

FSQ400 Italian Small Quantity Food Demanstration and Labs

Students are introduced to the preparation of Italian cuisine through daily demanstrations and labs. Included are the traditianal recipes and preparational styles at saups, pasta, rice, polenta, gnocchi, sauces and marinades used in Italian cuisine. Classes an specialized butchering, fish, shellfish and molluscs are also featured.

FSQ501

See FSQ101

FSQ701

See FSQ101

FSQ702

See FSQ102

FT101

See ELS121

FT532

See ELS121

FTC101 Food Theary Basic

This course provides the theoretical background necessary for the practical cooking courses which follow. Students learn about the basic ingredients used in cooking; what they are, and how and why they function as they da in the cooking process. This course is a required companent of the Basic Cook's Apprentice-ship Program.

FTC102 Food Theary Advanced

This course is a continuation of the Basic Food Theory course. The student continues to learn the internelation at ingredients and method of preparation. Topics covered is this course are on the examination tar the Certificate of Qualification for the trade of Cook, and this course is a required companent of the Advanced Cook's Apprenticeship Program.

FTC203 Food Theary III

In this course, the student will learn the theary behind the preparatian af cold food items such as salads, hars d'oeuvres, and canapés. Procedures tar handling various row products and storing prepared cold food items are covered. Prerequisites: FTC101 and 102, FLQ101 and 102, BK101, MT101, Menu Planning

FTC400 Italian Culinary Theory

Fallowing an introduction to the Italian "Batteria de Cucina" (cooking terminalogy), the origins and regianal features af Italian cuisine are presented.

FTC501

See FTC101

FTC502

See FTC102

FTC577 Food Theory

Terminology of Chinese cooking is discussed. Ingredients at traditional and modern Chinese food are described alang with their sources, storage requirements, and the reactians which occur when they are combined.

FTC701

See FTC101

FTC702

See FTC102

FURN104 Upholstery I

This course introduces the student to methods of upholstering chairs, completed from existing frames. Basic methods of springing, stuffing, measuring and cutting af fabrics, and finial application of fabrics are taught. The student has the aptian af buying the finished product.

FURN106 Technical Drawing

This course is intended to provide the furniture student with basic drawing skills and the ability to read blueprints. In addition to class assignments in lettering, line weights, layout, dimensioning, etc., students will make technical drawings af all waadworking projects.

FURN107 Design and Interiars I

An introductary course in the elements and principles of design as a foundation tar the study af furniture cabinets and interiars. Students will complete exercises to be included in their own angoing design warkbaak. There will be additianal exercises in freehand sketching and shading. Students will also learn where to find books and magazines and other reference materials and resources in the library and community.

FURN109 Finishing Theory and Materials I

Introduction to finishing materials, applicatians and schedules. Sample boards will be made up. Introduction to spray equipment.

FURN110 Cabinet Making and Wood Machining I

The student learns drawing, layout and preparatian af cutting lists af elementary projects and is introduced to the use af waadworking hand and power tools in making prescribed projects. Fitting, assembly, clean-up and surface preparatian af machined projects is also included. The student learns the safe, basic use af waadworking machines such as the radial arm saw, jainter, thickness planer, variety saw, martising machine, band saw, wood lathe and shaper.

FURN111 Waadwarking Theary and Materials I

This course teaches woodwark theary. The student will learn the basics af lumber, seasoning, defects, hardwoods, grading, veneers, plywood, fasteners, abrasives, adhesives, saw blades and grind stanes.

FURN112 Upholstery Theary and Materials I

A study af materials, modern and historical, used in the making af upholstered furniture. Care and use af upholstering tools and equipment. Safety in the warkshap. Knawledge af toxic materials used in the upholstery trade.

FURN113 Cabinet-making and Wood-machining II

Students learn drawing, layout, p w, jointer, thickness planer, variety saw, sliding table panel saw, band saw, martiser, waad lathe, strake sander, belt and disc sander, drill press, harizantal barer and shaper.

FURN114 Upholstering Theary and Materials II

This course includes a study af furniture frames and styles and an introduction to textile science, from fibre to fabrics. Fabric recognition, cantent analysis and performance testing are also included.

FURN117 Finishing I

This course is an introduction to finishing materials. The student will learn health and safety precautians with salvents and inflammatory materials, surface preparatian and simple finishing schedules and the mixing and applicatian af various stains.

FURN128 Small Business Management

This introductary course will caver planning and cantral, procurement, inventary cantral, and quality cantral. Supervision, plant layout and haw ta start a small business will be examined.

FURN129 Design Faundatians

This is an introductary course in the elements and principles of design as a faundatian tar the study af furniture cabinets and interiars. Students will complete exercises to be included in their awn angoing design warkbaak. There will be additianal exercises in tree hand sketching and shading. Students will also learn where to find books, magazines and other reference materials and resources in the library and in the community.

FURN153 Finishing II

This course provides an introduction to spray equipment and instruction in matian study and spray applicatian. An introduction to burn-in and touch-up materials, the use af glaze for antiques and rubbings schedules are also taught.

FURN154 Upholstery II

This course advances the student to the making of more difficult chair styles. It introduces the "webbing and coil" method af springing, the fitting and sewing af upholstery fabrics and the making af loose cushions. The production af a large wing chair is the finial project of the course.

FURN156 Technical Drawing II

This course builds on the material introduced in FURN106. Isametric and blueprint drawing are introduced.

FURN159 Finishing Theory and Materials II

This course gives further uses af spray equipment and covers applicatian, antiquing and rubbing.

FURN203 Finishing III

Burn-in and touch-up are taught in more detail. The use af paste filler an open grained waad is covered and water stain, wash coat and paste filler schedules are practised. Highlighting with the use af NGR spirit stain and oiled finishes is covered.

FURN204 Upholstery II

This course teaches methods in the manufacture af sofas, love seats and other larger pieces af upholstered furniture. Decorative upholstering techniques such as fluting and diamand tufting are introduced. The recovering and rebuilding af upholstered furniture is a major part af the course.

FURN206 Technical Drawing III (Computer Assisted)

This is an introductary course in the use af Auto Cad design saftwara. The student will learn haw ta make two dimensional drawings an the computer and haw ta dimension those drawings and plat them anta paper. There will also be a demanstration af computer controlled machinery.

FURN105 Introduction to Canadian Business

This is an introduction ta business, its role in the economy and the effect af the environment an business operations. Emphasis is placed an the ownership af property, the pursuit af profit, different market structuring, sole proprietarship, the partnership and the corporation and their inherent advantages and disadvantages.

FURN216 Industrial Sewing Machine Maintenance I

This course will equip the student with a basic understanding of the types af sewing machinery used in the manufacture af upholstered furniture. The student will be introduced ta the methods used in the care and maintenance af the basic machine, ardering parts, the use af the carrect tools and safety practices required.

FURN234 Woodworking Theary and Materials II

The student will learn the various cutting actians in waad machining using the circular saw, the band saw, ratary cutters, wood barers, the jainter and planer and abrasive cutters. The student will be able ta set up and operate machines ta perfarm mare complex aperations and will be able ta make jigs tar a defined range af machine aperations.

FURN236 Cabinet Making and Waad Machining II

The student will wark an various veneering techniques that involve veneering a flat surface, a curved surface, an edge and edge banding. The layout and making af a chair will also be included. Mare advanced waad machining will be covered in this section, including averhead router wark, designing and making af jigs and tool grinding.

FURN221 Wood Finishing and Restoration I

This course covers burn-in and touch-up. It also includes finishing without the use af spray equipment to freshen-up existing frames/chairs.

FURN222 Introduction to Canadian Business

This is a continuation af FURN105 in which many af the factors related to the running af a successful enterprise will be discussed. Students will be provided with topics and case studies for group discussion and also make group presentiaons af their interpretation af the subject material. Also covered will be the growing use af computers in business. Students will be received practical instruction an computers and the use af programs to assist in business management.

FURN223A Cabinet Making and Wood Machining III

The student will make original furniture, explaring techniques which are af special interest. The design and construction af a chair is compulsory.

FURN224 Finishing Theory and Materials III

The student will caver colour matching, antiquing, glazing and highlighting.

FURN225 Plastics in Furniture I

An introduction to plastics used in furniture in a warkshap setting prepares the student to handle and wark with these plastics.

FURN226 Finishing Theory and Materials IV

The student will experiment and make samples to campile a comprehensive partfalia.

FURN227 Upholstering Theary and Materials II

This course includes a study af many types af springing and suspensians. Upholstery styles and trends are examined and discussians are held an tufting techniques.

FURN228 Upholstering Theary and Materials III

Discussions af re-halstering techniques and restaration af antique furniture. Materials and methods.

FURN229 Furniture Design

This course will apply design principles to the design af furniture. The student will design assigned abjects as well as chaose abjects. Topics covered include problem salving, steps in designing furniture, farm, praportion, ergonamics and strength af materials.

FURN232 Furniture Design

Students will continue to design their awn furniture. The design af jigs (shop built devices) will be examined. The course will also facus an the preparation by each student af a portfalia af their wark far use with clients ar employers. Other topics covered will include architectural blueprint reading, estimating, and practical considerations relating to self employment.

FURN240 Upholstery III

This course teaches advanced techniques including spring-edge construction, semi-attached cushian backs and deep buttoning. Estimating far fabrics in recaver wark is emphasized and speed af praduction is encouraged.

FURN256 Technical Drawing IV

The student will continue to develop the sketching and drawing skills learning in Technical Drawing III. In addition, presentation methods will be covered to assist in compiling the student's partfalia.

FURN261 Wood Finishing and Restoration II

The student will learn further techniques af decorative finishing, including leating and antiquing. The student will make up colour samples tar further reference.

FURN263 Finishing IV

This course teaches the technique af applying decorative finishes, the use af toners and shading lacquer and the art af applying gald leaf and other metallic finishes. The mixing, spraying and rubbing af high glass palyester resin and catalyzed lacquers is also taught, along with aging techniques.

FURN266 Industrial Sewing Machine Maintenance II

This course applies the knawledge gained in FURN216 and provides the further knowledge necessary far the repair of the basic upholstery machine. The student will carry aut many af the standard maintenance functians and repairs required to ensure consistent quality performance an the basic upholstery sewing machine.

FURN551 Upholstery Theory I

This course includes safety in the warkshap, safe use af hazardaus materials, discussions an upholstering tools and power equipment and materials used in upholstering.

FURN552A Wood Finishing and Repair

This course provides an introduction to finishing materials, health and safety precautions, salvents and flammable materials. Surface preparation and simple finishing schedules are taught, along with mix and applications of various stains. The course also provides an introduction to spray equipment.

FURN553 Upholstering, Springing, Cutting, and Sewing I

This course teaches the production and restoration of all types af upholstered furniture. It includes cutting and fitting af fabrics, machine sewing, re-building and re-springing and application af fabric covering.

FURN554 Finishing Theory

This course teaches the selection of different types of stains, including oil, alcohol and water and their applications. It also covers the advantages and disadvantages of various coating materials, including lacquers, shellacs, varnishes and oils.

FURN555 Technical Drawing I

This course will provide the furniture student with basic drawing skills and the ability to read blueprints. In addition to class assignments in lettering, line weights, layout and dimensioning, the student will make technical drawings af all woodworking projects.

FURN556 Furniture Design

Details taken from furniture made aver the millenium are still used in furniture made taday. This course examines, through slide presentation, the various periads in the history af furniture design. You will learn about the change from hand made to machine made furniture and about the developments in the twentieth century.

FURN561 Upholstery Theary II

This course provides studies af upholstery, fabrics and furniture styles and discussian an custam upholstering restaration methods.

FURN562 Finishing

This course includes the use af liquid and paste paint remaver, and provides an introduction to the use af spray equipment. The student will make up and finish a sample board.

FURN562A Wood Finishing and Repair II

See FURN562

FURN563 Upholstering, Springing, Cutting and Sewing II

This course teaches advanced techniques in upholstering and re-upholstering. It includes coil-springing, spring-edges, diamand tufting and semi-attached cushians.

FURN564 Finishing Theory II

This course covers applications af various types af paint remavers, including bath paste and liquid preparations. It also covers preparatian af the abject prior to finishing.

FURN565

See FURN156

FURN566 History of Furniture

Details taken from furniture made aver the millenium are still used in furniture made taday. This course examines, through slide presentation, the various periods in the history af furniture design. You will learn about the change from hand made to machine made furniture and about the developments in the twentieth century.

GCD200 Creative Designer

This computer-assisted design course enables the student to create full-colour designs. The system is equipped to capture colour images from sketches, photographs or live models and display them on a high resolution colour manitor. By the end af the course, beginners in drawing will be able to produce unique designs with exceptianal fashian graphics.

GEM100 Gemmology I

In this course the student is tought the basic nature of the gem materials, their physical and optical properties and haw to test and identify them. Several specialized gemmalogical instruments are used to identify natural and synthetic materials and the imitations by comparing the physical properties, chemical campasition and optical characteristics.

GEM101 Gemstane Rendering

This course examines the application af gem materials in jewellery items through history and leads into the developments in jewellery appraising techniques. It explains the elements af appraising, the need far a comprehensive knowledge af precious metals and jewellery making techniques and the need af the knowledge af gems. A system af evaluation af all the components af appraisal is presented.

GEM102 Metal Testing and Identification

This course cavers: precious metals jewellery, precious metals marking act and testing precious metals; recagnizing manufacturing methods; recagnizing gem setting methods; cleaning jewellery and other merchandise before appraisal; stone weight estimation and stone grading procedure; quality grading an the entire item; basic techniques in determining a gemstane's calour grade; and pricing guide and lists-campanion charts.

GEM103 Diamand Grading

In this course students undertake an intensive study of diamonds, their origin, optical characteristics, inclusians of undesirable materials, differences in colour, imperfections in cutting as well as several styles of cuts and their optical characteristics. The standard diamand grading farm is used to classify and grade the stones to industry standards.

GEM110 Gemmology II

This course continues with the examination of gem materials with the emphasis an identifying the desirable characteristics as well as the flaws in campasition, crystal structure, colaur and the presence af undesirable inclusians. The grading af coloured stones according to arigin, colour, clarity and cut is practices by extensive use af gemmalogical equipment. Mare that 300 gem materials are studied.

GEM167 Gemmology

Definitian af natural, synthetic and imitation gems, nature and farmation af minerals, elementary crystallography, nature af light, electramagnetic spectrum, reflection and refraction af light, Snell's law and units af measurement, lustre and transparency, fracture, cleavage, stability, hardness and specific gravity, methods af nandestructive testing to descibe characteristics af given gems, the use af the loupe and polariscope. One field trip.

GEM177 Gemmalogy II

Single and double refraction, birefringence, critical angle of total internal reflection, optic axes and their application in gem setting, the use af the refractometer, polariscope, dichrascope and chelsea filter, and practice drawing of brilliant and step cuts, cabochon, doublets and triplets, phenamena in gems, principles af manufacturing synthetic spinel and carundum by Verneuil method, differentiation between natural and synthetic substances. Prerequisite: GEM167.

GEM267 Gemmalogy III

Study af crystals, optic signs, methods af determining refractive index, isamorphism and replacement, identification of the facets of the brilliant cut, accurate description of gemstanes, including the four C's of diamand grading., chrysaberyl, carundum, zircon, topaz and spinel. Prerequisite: GEM177.

GEM277 Gemmalogy IV

The study of crystallography is expanded to detailed analyses of the symmetry of the ten crystal systems, work with the laupe, microscope, dichrascope and other instruments, identify natural and synthetic gems, gem identification and proper use of instruments. Prerequisite: GEM267.

GEM367 Diamand Grading

Learn the physical properties of the diamand, optical characteristics, crystal structure, proportians of brilliant cut, angles and proportians, use of instruments such as leveridge gauge and table gauge, essentials af appraisal, distinguishing diamand from synthetics and other imitations, three types of appraisal. Prerequisite: GEM367.

GEM377 Diamand Grading

Practical diamand grading. Learn to plot and code blemishes and inclusions and assign a clarity grade, evaluate florescence using ultraviolet light and colaur grade by comparing the diamand with the colaur camparisan set, examine diamands for praportions, errors in cutting and carat weight/size. Identify laser treatments or colaur enhancements if present, grade fancy shapes and colaurs and mounted diamands, mining and marketing. Prerequisite: GEM367.

GEM411 Diamand Grading

Learn the physical characteristics af diamands, their optical properties, crystal structure clevages, fractures and susceptibility ta heat and chemicals, the four "C's" (colaur, clarity, cut and carat) of diamand grading, label all facets at the brilliant cut, old mine cut and old European cut, size praportians determined by measuring and weighing methads.

GEM412 Gemmalogy III

Learn ta identify a variety af natural and synthetic gem materials and imitations to avaid passible costly errars when accepting repairs. The study at unioxial and biaxial crystals, the use af gemmalogical instruments to accurately describe gemstanes including blemishes, inclusians and other characteristics as well as the prevalent types af cuts of different stones is oriented toward recagnitian and description.

GEM421 Diamand Grading

In this course the student uses the standard procedures of diamand grading. The appraising farm is used to nate specific characteristics at every diamand under observatian. Special emphasis is placed an the use af instruments and methads af investigation to identify colaur, blemishes, praportians of the cut and uniformity af facets.

GEM422 Gemmology IV
In this course the study of a variety of gemstones is continued with the emphasis on proper identification and description. Several instruments such as the loupe, the microscope, dichroscope, refractometer, polariscope, spectroscope, chelsea filters and ultraviolet lights and others are used to identify a substantial number of natural and synthetic gem materials.

GER200 Gerontalogy
This course provides the student with a knowledge of the demography and characteristics of the aged population.

GER201 Gerontalogy
This course is a psychological and social study of aging. Emphasis is on understanding the special needs of the elderly within the dental health field.

GERI101 Biology of Aging
This course will focus on the anatomy of adult body systems, age-related changes in anatomical structure and function, and age-related disorders common to the older adult. Implications of age related changes will be discussed.

GRAD219 Grading (Styles and Rule Tables)
The student will study and grade differently styled patterns using the hand grading machine. Four style groups are covered. Prerequisite: PAT282.

HEAL103 Introduction to Health Promotion
This 34 hour course introduces the student to the wellness and health promotion concepts. Wellness modules, health risk behaviours and lifestyle change are all discussed. Effective counselling techniques to facilitate lifestyle change are studied through a hands on application of the concepts in role playing.

HEAL111 Health Promotion/Life Skills
This course introduces the students to life skills concepts that will enhance their personal and career successes and enable them to derive greater benefits from their college experience.

HEAL202 Fitness Injuries
This 20 hour fourth semester course focuses on anatomy, symptoms and treatment of acute and overuse injuries resulting from physical activity.

HEAL213 Health Promotion
This 34 hour course focuses on development of presentation and counselling skills, by requiring the student to present health promotion/wellness material in the capacity of facilitator and counsellor. A section of the course is also devoted to helping the student make informed career choices by introducing them to key resource people who are involved in current health promotion and wellness activities in the field.

HEAL301 Health Promotion I
This course prepares the student as a "change agent" in regard to facilitating the patient to becoming more accountable for their own wellness. The student will initially be introduced to basic nutrition, fitness and stress management principles.

HIST104 General Histology
This course is designed to familiarize the student with cell cytology and basic tissue histology – epithelium, connective and muscle tissues.

HIST105 Dental Histology and Embryology
This course includes the general descriptive embryological principles that govern the formation of the face, neck, oral cavity, including dental structures.

HIST106 General Histology for the Dental Hygienist
This course is designed to familiarize the student with cell cytology and basic tissue histology – epithelium, connective and muscle tissue. The nervous tissue will be covered in Advanced Head and Neck Anatomy.

HIST107 Histology
This course will provide the Chiropody student with a knowledge of the primary normal anatomy and physiology of a typical human cell, of the primary tissues, and of the skin.

HIST116 Dental Histology & Embryology
Having mastered the fundamentals of general histology, students will progress to a basic course in Dental Histology and Embryology.

HIST116 Dental Histology
Having mastered the fundamentals of general histology, dental hygiene students will progress to a basic course in Dental Histology and Embryology. Dental Histology includes the general descriptive embryological principles that govern the formation of the face, neck, oral cavity and dental structures. The course extends these concepts into development of each of the tissues of the tooth, periodontium, oral mucosa and associated structures.

HIST202 Ceromic/Art History
This course surveys western and eastern ceramics from 5000 B.C. to pre-industrial revolution period (Egyptian, Mesopotamian, Minoan, Greek, Roman, Chinese, Korean and Japanese cultures).

HIST252 Ceromic/Art History
This course surveys the post-industrial revolution, including art ceramics of the 19th century, the art and craft movement of the 20th century, contemporary ceramics, art history, and social and creative factors.

HIST400 Advanced Dentol Histology/Embryology
This course will build on previously acquired knowledge of the dental tissues. Having reviewed the fundamentals of oral histology, emphasis will be placed on oral embryology and the histology of the hard and soft tissues of the tooth in situ. Recent advances in the field will be emphasized in relation to clinical considerations of restorative and preventive dentistry.

HK201 Housekeeping
This course provides an introduction to the importance and responsibilities of the housekeeping division of a hotel.

HLTH30 Fitness Management Projects III
This course involves the selection, planning, operation and evaluation of an "Initiative Project" within the placement agency. The model of management by objectives is followed through the major job duties, initiative project, and the weekly log completions. Prerequisite: Successful completion of Semester I, II and III.

HOUS111 Housekeeping Theory
This course provides the student with an understanding of housekeeping costs, organization of labour for housekeeping, contract cleaning, waste disposal, care and maintenance of building materials, equipment requirements and applications, purchasing and inventory control.

HOUS112
See HOUS111

HRM104 Human Resources Administration
This course will make the student "literate" in the issues of human resource management, including the relationship between the human resources function and the rest of the organization.

HRM201 Compensation and Benefits (Pay Equity)
This course provides an understanding of the process, issues and techniques involved in developing and administering a compensation system. The course will examine pay equity legislation and its impact on job evaluation, job class identification and comparison, wage adjustments and resulting implications for equitable compensation for all.

HRM203 Staff Training and Development
This course provides the student with an understanding of the role of training and development in human resource management and its importance as a strategic approach to improved productivity, efficiency and profitability in the organization.

HRM205 Recruitment and Selection
This course explores and analyzes the processes of applicant search, screening, interviewing and selection with a view to ensuring a bias-free approach which is inclusive in intent.

HRM207 Human Resources Information Systems
This course presents the basic concepts and structure, including the usual subsystems comprising an HRIS; sets out the steps involved in developing an HRIS; and provides a survey of commercial HRIS software currently available. Collection of sensitive personal data and related privacy management will be covered.

HRM209 Human Resources Planning
This course introduces the student to human resources planning, including research techniques and appropriate use of HRIS, and provides an understanding of the essential elements of the planning process and its role in the achievement of organizational goals.

HRM211 Managing Change: A Co-Operative Task
This course examines the issues involved in facilitating organizational change and explores both tested and innovative techniques in the context of a worker/employer partnership.

HRM213 Collective Agreements: Negotiation and Administration
This course introduces the student to a study of the worker organizing processes; collective bargaining; emerging issues for negotiation such as pay equity, employment equity, sexual and racial harassment, workplace safety and environmental integrity; and administration of collective agreements.

HRM215 Employment Equity
This course examines generally accepted elements of employment equity programs from legislative, economic, human rights, and ethical perspectives. The prevailing theme of this course will be the importance of diversity in the workforce to the overall success of an organization.

HS105 Physics (Sound)
This course provides to the student the opportunity to develop an understanding of the physical and acoustical properties and characteristics associated with sound waves and the human hearing mechanism.

HS106 Audiametry and Hearing Disorders
The course introduces clinical assessment of hearing using puretone, speech and immitance audiometry and other specialized procedures. It offers an overview of hearing loss related to various disorders and the rehabilitation of hearing loss by medical means and through use of amplification.

HS107 Ethics/Professional Management
This course explores the concept of professionalism and the responsibilities and accountabilities of the professional in our society. The ethics associated with providing health services to the community form an important part of the course.

HS108 Level I Theory and Applications
This course provides the student with the theoretical/practicum background to hearing instrument technology, the various types of hearing devices, their components and functions.

HS111 Counselling
This course will help the student to learn specific practical counselling strategies for assisting clients.

HS111 Counselling
This course offers and overview of the social and psychological effects of hearing loss and provides the students with specific practical counselling strategies for assisting clients. Prerequisite: HS106, HS108.

HS114 Level I Theory and Applications - Part 2
This course concentrates on the clinical administration of dispensing practices and applies the theory presented in the Prerequisite and Corequisite courses. Prerequisite: HS106, H2108, ANAT127A

HS118 Practicum Consolidation
This course provides the student with practicum experience in hearing instrument technology, fitting hearing aids, etc.

HST358 Introduction to Mathematics
This course covers the fundamental concepts and operations of arithmetic and algebra, including geometric formulas, square root, fractions, decimals, percentages, units of measure, metric system, word problems, graphing straight lines and more.

HT105 Fuels I
This course covers fuel: types, availability, comparative cost, production, distribution, properties and characteristics, combustion principles, venting and piping design and controls and safety devices.

HT205 Fuels II
This course covers fuel: applications and handling. Code requirements, the utilization of fuels in warm air and hot water systems, and flue gas analysis and system operating efficiencies.

HT501 Oil Burner II
This course is half theory, half practical work. The student will study all necessary theory and codes in preparation for the MBMI license examination at the completion of the module. Practical shop work is directly related to theory and involves hands-on work on both old and modern types of equipment.

HT502 Basic Electricity
This course is half theory, half practical work. The theory portion directly relates to practical applications in the trade. Each student will also build and test working projects which relate to the theory studied, and will relate to the other H.V.A.C. work later in the program.

HT510 Residential Heat Load
This course constitutes a study of the principles of heat loss and heat gain for residential structures. The student will learn about the different types of structures which are common today. Also studied are the factors which determine the insulation values of a structure such as heat transfer, personnel comfort, building materials, location, etc. This will relate to HT572, H.V.A.C. System Design.

HT514 Commercial and Industrial Gas Burners
In this course commercial gas fired heating units and their control systems will be studied. Theory will then be applied to shop projects first on simulator units and then on actual commercial burners in the shop. Both shops will use a number of different modern electronic control units. Upon course completion, the student will write the Gas Fitter I License examination.

HT521 Air Conditioning and Heat Pumps
This course is a study of the principles of central air conditioning systems and heat pumps. The student will learn about the theory behind all the components of each system and then, with shop projects, how to install, set up, test, wire the controls, and troubleshoot a residential system.

HT534 Propane Fitter II
In this course the student will study the theory and chemistry unique to propane gas and how to properly design a propane piping system, from the tank to the appliances. Ontario Codes for propane are studied in depth. At module completion, the student will be prepared to write the Ontario Propane II License examination.

HT540 Gas Fitter II
In this course the student will study the theory and codes for residential, natural gas use. Standard, mid-efficiency and high-efficiency furnaces, boilers, and water heaters are covered. Half the course is a practical shop work on the equipment mentioned. At course completion, the student is prepared to write the Gas Fitter II License examination.

HT569 Electricity
This course is half theory and half practical. The theory portion relates directly to practical applications in the trade. The student will also build and test working projects relating to the theory studied, and will relate to the other H.V.A.C. work later in the program.

HT570 Residential Gas Burners
In this course, topics covered in relation to trade application include: properties of gas, gas physics, gas meters, pressure regulators, piping, venting and air supply; the atmospheric burner and its control principles; hot water heaters and conversion burners; and many shop projects on actual gas appliances and burners.

HT571 Residential Heating Equipment
This course continues from HT570 and covers central warm air systems, humidifiers, electronic air cleaners, basics of air conditioning, domestic boilers and pool heaters, mid- and high-efficiency furnaces, and theory and practical work on shop equipment. Upon course completion, the student will write the Gas Fitter II License examination.

HT572 Residential H.V.A.C. Design
In this course the student will learn how to design a heat/cool distribution system and how to redesign, update, or add on to an existing system. How to set up and balance a warm air system is also covered, as are principles of humidification and dehumidification and zone control systems.

HT573 Gas Fitter I
In this course, commercial type gas fired heating units and their control systems will be studied. Theory will then be applied to shop projects on simulator units and then on actual commercial burners. Both shops will use a number of different types of modern electronic controls. At course completion, the student will write the Gas Fitter 1 License examination.

HT575 Commercial Systems
This course constitutes a study of the various types of residential and commercial heating systems, including: hot water, single zone and multi-zone; steam heating, high and low pressure types; multi-boiler systems; and make up air heaters and commercial central heat/cool systems, along with control systems and components for each.

HUM104 Ethics and Values
This course investigates issues concerning the medical field from an ethical and value-oriented viewpoint. The framework of the course allows for student seminars and discussion.

HUM126 World Religions
The practice of religion is widespread and unique to humans. It shapes and reflects the deepest convictions of people about what is most important in life. This course explores the nature of religious experience and introduces the worldviews, practices and beliefs of the major world religions. A brief background in origin and development of each religion is included. Additionally, the course identifies beliefs, practices and requirements of major religions which may have bearing on the health care setting.

HUM141 The Search for Meaning
This course introduces students to the discipline and spirit of philosophy. By means of an exploration of a variety of topics, the student is encouraged to develop their skills in analysis and philosophical enquiry. The student is exposed to a number of the branches of philosophy, including logic, epistemology, ethics and politics.

HUM237 Cantemporary Moral Problems
This foundation course in ethics introduces some major ethical perspectives and explores some contemporary moral issues. The student is taught to evaluate the structure of philosophical arguments, to understand their implicit assumptions and to determine the soundness and validity of such arguments. The essential goal of the course is to help the student develop his or her own thoughtful perspective on current moral issues.

HUMN104 Ethics in Chiropody
This course is an introduction to ethical thinking and problems related to the health care field, including the allocation of health care funds. Lectures, small group work, case studies and presentations will be used.

HUMN126
This course explores the nature of religious experience and introduces the worldviews, practices and beliefs of the major world religions. A brief background in the origin and development of each religion is included. The course also identifies beliefs, practices and requirements of the major religions which may have bearing on the health care setting.

HUMN142 Canoda in the 20th Century
This course includes an overview of the history and geography of Canada as a basis for discussion and analysis of economics, political issues, aboriginal rights, environmental problems and multiculturalism within the framework of Canadian society.

HUMN143 Issues in Cantemporary Life
This course offers an intense and thorough examination of one particular issue of paramount importance in contemporary life. Topics such as labour, tribalism, and aboriginal peoples' rights are examples. Students are taught to investigate any issue from an interdisciplinary perspective.

HUMN144
See HUMN126

HUMN200 Chiropody in the Cammunity (Problem Solving)
A hands-on approach to problem solving and interpersonal skills required to deal with current social and political issues affecting chiropody in Canada. Small group work, role plays and speakers will be used.

HUMN203 Arts and Humanities Project
An advanced research project in the arts and humanities.

HUMN237 Cantemporary Moral Problems
This foundation course in ethics introduces some major ethical perspectives and explores some contemporary moral issues. The student is taught to evaluate the structure of philosophical arguments, to understand their implicit assumptions, and to determine the soundness and validity of such arguments. The essential goal of the course is to help students develop their own thoughtful perspective on current moral issues.

HUMN303 Introduction to Music and Art in the Western World
This course correlates music and art with history and provides a useful understanding of the meaning of a wide range of art forms. The aim of the course is to introduce the various kinds and periods of art and classical music with the hope that the student will be encouraged to seek more artistic experiences.

HUS100/200 Field Wark I & II
The first unit of 400 hours consists of active participation in community agencies providing direct client service. The students function first as observers, then as co-counsellors and finally with autonomy under direct supervision. In the second placement, 600 hours provide the student with opportunity to further develop skills and approximate greater autonomy in helping through counselling individuals, families and groups. Learning contracts focus expectations of college, agency and student and are the basis for evaluation.

HUS101/201 Field Wark Seminar I & II
The students meet weekly to discuss events in the field, the relationship to classroom work and problem solving. This course provides support for students with a focus on their field practice.

HUS102/202 Counselling Theory and Practice I & II
This course introduces an empathetic, problem solving model of helping: assessing, planning, contracting, treating and evaluation. In the second semester, current treatment theories and practices are reviewed. Role plays and case studies are used to illustrate the skills, knowledge and attitudes most appropriate for effective helping. In the second year, a more in-depth examination, with case illustrations, explores counsellor activities in the beginning, middle and ending phases of treatment.

HUS103/203 Graup Process I & II
The emphasis of this course is the development of self-awareness, communication and interpersonal skills plus understanding group dynamics. In the second year, attention turns from facilitating skills as members to leadership skills.

HUS104 Human Growth and Behaviour I
This course examines personality development and the normal age and stage developmental patterns over the entire life span.

HUS105 Sociology
This course includes an introduction to the basic concepts in Sociology and gives students some beginning objectivity for looking at behaviour in groups, institutions and general society.

HUS106 Introduction to Human Services
This course provides a beginning examination of the three areas of concentration in the Human Services Counsellor program.

HUS107 Introduction to Basic Research Skills
Through exercises and examples, the students learn how to clarify their thinking, develop clear questions and focus information collection. The learning can be then applied to program evaluation.

HUS109 Life Skills Methodology I
This course combines theory with practice and emphasises skill development and problem solving to deal with life situations under the categories of personal, self, family, work, leisure and community.

HUS110 Counselling Practice Laboratory
Students have an opportunity to practice the micro-counselling skills in a safe environment. Specific skills are identified and related to the over-all counselling process. Video and audio recordings assist in giving the students feedback and begin skills of self-evaluation.

HUS115 Values, Ethics and Professianalism
This course explores values affecting the counselling relationship, codes of ethics of other professions (and a potential code for Human Service Counsellors), plus responsibility to clients, agency, society and self.

HUS209 Life Skills Methodology II
A continuation of HUS109.

HUS210 Pharmocology and Physiology
This course is designed to familiarize the students with basic principles of pharmocology and related physiological processes and to provide an overview of the pharmacology of psychoactive drugs.

HUS222 Addictions Cancentration
This course provides a historical review of people's use and abuse of chemicals, society's responses, social attitudes and relevant legislation. Dilemmas still present in the field are identified. A survey of current services concludes the course.

HUS224 Mental Health Cancentratian
A historical review of the concepts of mental illness and society's responses or lack of responses form the basis for this course. It clarifies some of the attitudes, fears and misconceptions about mental illness. Modern treatment, both clinical counselling and pharmaceutical management, is explored.

HUS226 Criminal Justice Concentration
Crime and punishment have been a part of society since the beginning of time. A historical review sets the background for exploring key issues, dilemmas, attitudes and responses facing workers in the criminal justice field. A survey of services, statistics and current philosophies with implications for counselling identify the competencies required in this field.

HUS228 Special Studies in Addiction
The Special Studies course offers appropriate strategies in case management of clients/patients with substance abuse problems. There is more detail about services and information to assist in prescriptively referring clients to the most appropriate service.

HUS230 Special Studies in Mental Health
The companion course when Mental Health is chosen as a major, examines in more detail many of the current drugs being used to ameliorate the physical and emotional aspects of mental illness. Case management is highlighted. The tension between hospital versus community-based treatment is explored.

HUS232 Special Studies in Criminal Justice
The different viewpoints of deviant behaviour set the background for an understanding of crime, the criminal and the services within the criminal justice system. The student is expected to be able to identify the major characteristics of the system and services. There will be a secondary emphasis on values, lifestyles and conflict.

IL506 Advanced Listening for International Students
This course is designed to provide ESL students with knowledge of major language functions and corresponding techniques and vocabulary so that the student will accurately comprehend a wide variety of spoken English, including small talk, social communication, semi-formal and formal exchanges.

IL507 Advanced Speaking for International Students
This course is designed so that a student with adequate ESL speaking skills can learn and practice appropriate techniques related to major language functions, thus enabling the student to communicate with increasing effectiveness and confidence in non-controlled language environments.

IL508 Advanced Reading for International Students
This course is designed for ESL students who can already comprehend brief reading exercises. The content includes dictionary usage, idioms and vocabulary building using prescribed lists and words from readings, and short articles to read in order to improve comprehension and personal vocabulary. Other readings will be studied and discussed for meaning and ideas.

IL509 Advanced Writing for International Students
This course is designed for ESL students who have already mastered the major grammar rules and structures of English. The content includes instruction and practice in building complex sentence structure, writing basic daily journals and simple compositions, and constructive grammar and structure corrections. The emphasis is on developing fluency by choosing appropriate tenses, voice, word order and sentence patterns.

IL511 Listening for Academic Purposes
This course prepares students for the demands of academic lecture comprehension and note-taking. It teaches students how to listen to a lecture and take notes; how to use cues and cueplies, RTD's, orifice plates, hands-on lab collibration, repair conventions in lectures that indicate organization and emphasis; how to recognize redundancy, and how to predict the message of the lecture.

IL512 Speaking for Academic Purposes
This course prepares students for the varied language uses they will encounter daily in their academic careers. They learn strategies for speaking in academic settings so that they can interact appropriately. Students have the opportunity to practice academic English in a variety of activities, such as individual presentations and participation in group discussions and seminars or debates.

IL513 Reading for Academic Purposes
This course prepares students to read and understand material at the college level. The course includes instruction and practice vocabulary building, explicit and implicit comprehension, and critical anolysis. Time is also provided for improving reading speed and increasing grade level. A large component of the content comprises information on Canadian background and culture with excerpts from magazines, newspapers, business texts and technical courses.

IL514 Writing for Academic Purposes
This course prepares students to write at the college level. Time is allotted for development of computer skills using WardPerfect software and other programs designed to improve English structure. The course contains a comprehensive review of grammar, spelling and punctuation. Also included are library research skills and organizational patterns needed to develop social/business correspondence, essays and reports.

IL5200 Illuminated Signs
The student is introduced to the basic construction and electrical components of the boxes of illuminated signs, and to the properties and applications of plastics used for the sign faces. The emphasis is on the production of the sign faces. The student learns the different methods of masking, cutting and paint applications. Translucent films are used to produce sign faces. The student is introduced to the fabrication of channel letters.

ILL5201 Illustration II
This course examines editorial, design and advertising applications to produce illustrations in a variety of styles and techniques. This process, combined with a study of contemporary illustrators, helps the student develop the necessary skills and knowledge needed to make appropriate choices as designers and art directors.

ILL5211 Illustration III
This course continues to examine editorial, design and advertising applications to produce illustrations in a variety of styles and techniques. This process, combined with a study of contemporary illustrators, helps the student to develop the necessary skills and knowledge to make an appropriate choice as a designer and art director.

ILL5320 Illustration IV
This course focuses on the role of the illustrator in advertising. It explores the comping of layouts, television story boards, illustration for newspaper, magazine and outdoor advertising, fashion, real estate, and exotic products.

ILL5325 Illustration V
This course further develops the skills of comping of layouts and story boards, illustrations for newspaper advertisements, magazine and outdoor advertising, fashion, real estate, and exotic products. Assignments are scheduled to coincide with those of other courses. This provides the student with the opportunity of further developing and improving projects designed in other courses.

INDS222 Independent Study (Lab Projects)
In this course the student divides the five hours into individual projects in his or her selected options (e.g. throwing, hand building option – the student is required to complete additional throwing and hand building projects of greater complexity than projects in option I).

INS214
See INS211

INST104/105 Measuring Principles
Learn the basics of physical measurements, a physics review, the basics of pressure, level, temperature and flow measurements, types of transducers and instruments, pneumatic pressure elements, differential pressure cells, ultrasonic transducers, thermal couples, RTD's, orifice plates, hands-on lab calibration, repair wiring and installation of various instruments used in the field, from pneumatic to state-of-the-art microprocessor-controlled units.

INST201 Final Control Elements
Learn the construction details of final control elements specifically pneumatic control valves, different types of valve bodies including globe, split body, angle body, mixing and butterfly, valve sizing and selecting a control valve, hands-on training in assembly and disassembly, repair and calibration of control valves.

INST202 Analytical and Environmental Instrumentation
Learn the branches of analytical instrumentation common to both industrial and environmental concerns,the basic principles of these instruments and hands-on experience in their operation and application, troubleshooting procedures of selected instruments, theoretical concepts, conductivity, pH, viscosity, humidity, chromatography, spectrophotometry and other analyzers.

INST209A
See INST105

INST2098/210 Autamatic Control Principles II
The concepts of automatic control principle, process terminology, hardware and configuration, types of controllers, fundamentals of a process loop, step response, ultimate cycle and frequency response analysis to tune the process loop,duplex, ratio, feedforward and cascade control, including distributed control using the Bailey Network 90 system, Moore Micro Series Smart Controllers & Transmitters and Direct Computer Control.

INST299 Technical Report
Learn to write a minimum of 3000 word report on some application or aspect of electronics. Covering some subject not covered in theiry, use available resources to research a topic and write a comprehensive report.

INST310
See INST2098/210

INT118 Field Work Practice I, II, and III
These courses give each participant approximately 600 hours of guided and supervised experience working with deaf-blind individuals. Each learner will be required to select three different placement agencies that expose them to working with congenitally and adventitiously deaf-blind persons. Students will be encouraged to do a final placement reflective of the area in which they plan to seek employment.

INT119 Human Growth and Development I and II
The general study of human growth and development will be paralleled with the impact of deaf-blindness on development. Intervenor students will review the characteristics of each stage of development and the class will be involved in an in-depth examination of issues related to how individuals and groups communicate at each stage.

INT120 Interpersonal Skills
This course provides Intervenor students with an introduction to theories and practices of interpersonal communication. The course will follow an experiential format which encourages participants to reflect on and identify their strengths as communicators. Classes will provide each learner with opportunities to discuss and practice communicion skills as well as reflect on the process whereby such skills are acquired.

INT121 Intra to Field and Community Resources
Visit deaf-blind individuals in a variety of locations and will be introduced to many elements which impact on the lives of deaf-blind persons.Learn the variety of ways the intervenor is significant to the quality of life experience by the deaf-blind individual, to access existing community programs to meet the individual needs of deaf-blind persons, the goals, objectives and achievements of consumer groups, service providers and government agencies, income, housing, health care and transportation issues as related to deaf-blind persons.

INT122 Deaf-Blind Communications I
This course includes American Sign Language (adapted), Braille, signed Exact English, ATSIL, one-hand alphabet, British two-hand manual, theary on the history and development of various forms of sign language and the philosophy of communication with deaf-blind persons. Laboratory instruction and skills practice support and reinforce theary.

INT124 Assistive Devices, Orientation and Mability
The learner develops an appreciation of the wide variety of assistive devices used by deaf-blind persons and is able to troubleshoot for specific problems, assess the suitability of a device for individual consumers, and be familiar with the assistive devices program.

INT125 Sociology (Relevont to Deaf-Blind Persons)
Introduction to the basic concepts in sociology gives the learner some beginning objectivity and o way of looking at group behaviour, institutions, families, and society in general. The course will examine not only the way people behave but also why they behave as they do. Intervenor students are made aware of the psychological impact of deaf-blindness on different individuals. Specific information is given to extremes in human psychological development at all ages.

INT126 Field Work – Seminars I, II and III
These classes give the learner opportunities to discuss all aspects of their field placement. Through examination of issues, skills and values, the seminar supports integration of classroom theary with field practice and models mutual support among intervenors. In addition to discussion, faculty and learns will present materials relevont to work in the field.

INT127 Deaf-Blind Communications I
See INT122

INT129 Human Growth and Development II
See INT119

INT210 Values, Ethics and Professional Issues
Learners are exposed to moral and professional issues related to working in support services. The class develops skills enabling interaction with deaf-blind persons, significant others, and professionals, in a positive and supportive manner. Attention is given to the need for confidentiality of information, legal rights and responsibilities in our society. The dynamics of the relationship between intervenor and client are examined in detail. The class explores codes of ethics of other professionals and the responsibilities of consumers, agencies, society, and self.

INT216 Field Work Seminar
See INT126

INT217 Field Work Practice
See INT118

INT218 Deaf-Blind Communicationos II
See INT122

INT227 Research Project
Through exercises and examples, the learner discovers ways to think clearly and to develop questions and collect information. The course exposes the learner to a variety of research tools and methods of choosing, collecting and examining information. The individual's work is aligned closely with the current needs of the deaf-blind community.

INT228 Field Work Practice
See INT118

INT229 Field Work Seminar
See INT126

INT231 Deaf-Blind Communications I
See INT122

IPO500 Group Vocational Exploration and Assessment
This course is a structured, systematic exploration and assessment of the individual's interests, skills, and abilities as they pertain to their vocational choices. Psychometric tests, self-report inventories, and group discussion are the techniques used to increase the person's awareness of themselves in these areas.

IPO501 Life Skills
Through a variety of techniques, students will explore and practise skills in such areas as effective communication, assertiveness, stress management, time management, decision making, goal setting, conflict resolution, problem solving, resumé writing, research skills, positive feedback, and lifelong planning.

IPO503 Individual Vocational Research and Assessment
This course allows students the opportunity to apply the various skills they have acquired from IPO500 to evaluate their individual career options. Students conduct their research and assessment projects independently based on a plan developed in course IPO 504.

IPO504 Vocational and Personal Counselling
During individual sessions with the counselling staff, students will discuss those vocational and personal issues influencing their vocational options which are not covered in the group classes. The counsellors employ a methodology which allows students to evaluate the merits of each of their options and ultimately, to strategize how to achieve their vocational choice given the current personal and societal realities facing them.

IPO505 Academic Preporation-Mothematics/ Computer Literacy
In this course, students are provided with the opportunity to review basic mathematics skills or to familiarize themselves with Macintosh computers/IBM PCs in preporation for college training programs.

IS101 COBOL I
This course provides on introduction to COBOL. Students develop algorithms and apply techniques of structured program design in developing COBOL programs for processing sequential files. Prerequisite: IS115.

IS103 Programming
This course deals with structured programming, top-down problem solving, and design of algorithms. Students apply these skills in other courses for developing computer programs using various languages. Prerequisite: IS115.

IS104 Monagement Informotion Systems
This course deals with the features of DOS along with the features of a database management system. Participants will implement a Management Information System involving several programs employing structured-programming principles using the language features of the database management system. Prerequisite: IS115.

IS107 Introduction to Informatian Systems
This course will enable the student, given written procedures representative of the business environment, to use a PC-based word processor to prepare a number of basic characteristics; use a PC-based data base manager to create a data base, perform inquiry and update; and use a PC-based spreadsheet to organize and manipulate numerical data in a table format.

IS115 Introduction to Informatian Systems
This introductory course acquaints students with the use of computer systems to satisfy business information needs. Programming is introduced, with emphasis on problem solving and structured program design. Computer-based activities include use of DOS to manage files and use of database software to develop programs for business applications.

IS200 COBOL II
This course introduces VSAM concepts and terminology for COBOL programming. Modular programs for business transactions using COBOL-85 will be coded and tested. Topics include ACL, Access Method Services for VSAM, subprograms, VSAM entry-sequenced data sets and key-sequenced data sets, and alternate indexes. Prerequisites: IS101, IS103.

IS204 Advanced Programming
Structured logic and modular program design for online processing will be applied in a CSP environment. A multi-user, menu-driven, commercial system, covering applications such as accounts receivable or payroll, will be implemented. Topics include Cross System product application development, utilities and file maintenance under CSP, online concept, user interface, alternate keys, and multi-user design in CSP. Prerequisites: IS200, IS210, IS205.

IS205 Database Concepts
This course deals with the theory and features of database management systems along with features of a fourth-generation language such as SQL, to manipulate data in a relational database. Participants will design a relational database system for a specific business application. Prerequisites: IS103 and IS104.

IS206 Programming in C
This course introduces the C language as a vehicle for writing programs to deal with business applications. Emphasis is placed on problem analysis, structured top-down program design, readable code, input validation and program testing. Prerequisite: IS103.

IS208 Advanced Information Systems Topics
This course deals with the analysis and design phases of a typical business application using Structured Systems Analysis and Information Engineering techniques. Participants will construct and implement a major system in a microcomputer-based relational database management. Prerequisites: IS200, IS205 and IS210.

IS210 Systems Analysis and Design
This advanced course deals with the data, information and control requirements of decision support systems. The successive phases of the system life cycle, from conception through post-installation review are examined. Specific relevant techniques are applied in exercises and projects. Prerequisites: IS103, IS104.

IS216 Operating Systems and Networks
This course surveys hardware and operating systems software of microcomputers, data communications, and mainframes. The course includes detailed examinations of the architecture of PC/AT compatible microcomputers, the DOS operating system, local area network architectures, Novell NetWare, the IBM 370/390 Architecture, and the functional components of multi-user mainframe operating systems. Prerequisite: IS210.

IT405 Introduction to International Trade
The course will cover: world economic environments; varied cultural environments; political and legal environments; marketing to the world; international product policy; distribution; international promotion; pricing in international markets; market planning and the organization and control of international marketing; free trade implications.

IT410 International Banking and Finance
In this course the following topics will be covered: capitel needs for international trade; working capitel; market penetration costs; capitel investment; sources of government and other international funding for international trade operations; foreign commercial payments; financiol risk and risk management; commercial risk; political risk; foreign-exchange risk; management of financial risks; hedging; foreign exchange options and the role of business partnerships and joint ventures in international trade.

IT420 International Communications
The course focuses on written and oral communications within the international business context. Using Hofstede's Dimensions of Culture and the cultural experiences of class participants, students will identify and use appropriate styles and formats for communicating with clients in a variety of representative business cultures. Because the course emphasizes grammar, usage, and readability as essential to effective communications, a certain amount of time will be devoted to the improvement of these skills.

IT425 International Market Cultures
In this course the student is prepared for global business environments including: the areas of protectionism and trade restrictions; assessing the cultural dynamics of global markets; cultural knowledge (factual knowledge, interpretative knowledge, cultural sensitivity and tolerance); culture and its elements; cultural exchange (culture borrowing, how similarities can be illusions); resistance to change; planned cultural change and consequences of innovation.

IT430 Faculty Directed Research
Students in this course and IT465 will develop o working knowledge of international trade and the development a marketing plan. Because of the competitive need in international trade, as part of the strategy, excellence and quality will be emphasized. A work experience component between semesters will be spent in the workplace as co-operative work experience. This experience should have a "hands-on" approach whereby the student will perform and learn at o productive level.

IT435 International Troffic and Transportation
Students learn: methods of transportation; insurance; documentation preparation and handling; preform invoices; instalment shipments; invoicing errors and omissions; adjustments; entry and exit of goods; insurance and carriers; liability for duties; freight costs; excise; liquidation; mail and parcel post and courier; ocean, air and truck transportation; dutiable status; currency conversion; temporary free importation; refunds and drawbacks; excess goods and shortages; damage and deterioration; marking and packaging requirements.

IT440 Internationol Trade Law
This course provides an overview of the bases for legal systems, jurisdiction in international labour disputes, legal recourse in resolving international disputes; protection of intellectual property rights; inadequate protest; contract law; offers and acceptances; the role and importance of oral contracts; commercial law in certain countries, international conventions; counter trade laws; Canadian and other laws that apply to import and export trading and as they apply to Canadian companies abroad; technical standards as trade barriers.

IT445 International Negotiation, Bids and Purchases
Students learn to access government services and sponsorship; government and I.F.I. funding and support programs, where to start planning; getting preliminary approval; developing the project plan; what documentation is needed; prequalification and procedure; risk and risk management; differing technical and professional standards; writing the proposal; giving references; getting approval and completing an agreement; negotiating and closing the deal.

IT455 International Business and Strategic Planning
The need for meticulous research and extensive planning and preparation will be addressed. Strategic planning and market planning processes will be studied. The student will also examine alternative distribution channels and the factors affecting the choice of these channels. Other areas that will be studied are distribution patterns and relationships with a range of distributors, agents and other intermediaries.

IT460 International Customer Relations
Students examine the differences in customers in other parts of the globe and how to relate to them and serve them. The student will look at relationships between cultures and business customs, required adaptation of services, modes of doing business, business ethics including bribery, differences between developed countries and less developed countries, departure from socialism, domestication of the product or service abroad and establishing acceptance for the product and methods of doing business.

IT465 **Faculty Directed Research**
See IT430

IT470 **Customs Procedures**
In this course the following topics will be covered: documentation (commercial invoices, permits, quotas, import and/or export licenses, bills of lading, certificates); trade terms; methods of payment; customs commercial system; Customs Act; implementation of the Customs Act; excise tax; import duties; sales taxes and the general sales tax; free trade and its implications; free trade zones.

JWL160 **Introduction to Jewellery**
In this course the student learns the basic skills of metalwork. The student learns to use the measuring instruments; jewellers' saws and files and soldering equipment by completing a number of relevant projects in brass. The ultimate projects are a round and a hexagonal box made to exact specifications.

JWL165 **Theory of Specialty**
In this course the student learns the principles of filing and sawing, the types of solder and soldering techniques, alloys used in jewellery, pickling procedures for soldered objects, bandring theory (formulas), the theory on designing the round and the hexagon boxes, the theory on working with tubing.

JWL166 **Grinding and Polishing**
In this course the student is instructed in the theory and in practical use of cutting compounds such as carborundum laps and other hard and semi-hard abrosives. Felt laps and their use and a variety of brushes are also introduced.

JWL171 **Goldsmithing II**
In this course the student is required to produce four projects of their own design in silver. The projects are: pendant, brooch, ring and earrings or cufflinks. Each of the four projects must be approved by the professor and completed within the specified time limit to a predetermined quality standard.

JWL175 **Theory of Specialty**
In this course the student is introduced to silver and the ways it can be finished such as texturing, oxidising, repousse and others. The student also learns the principles of basic gem setting, chorcoal and cuttefish casting and ingot making.

JWL176 **Grinding and Polishing**
This course covers the theory in the use of rouges and the step-by-step instruction in grinding and polishing ring castings to manufacturers' standards.

JWL202 **Gem Setting**
The student is required to manufacture seven practical projects in either brass or silver. The projects are: four claw tubing setting, four claw tubing and wire setting, four claw wire setting, octagon, baguette, marquise and pear shape setting. Principles of basic setting preparation are explained and demonstrated.

JWL251 **Jewellery Repair**
In this course the student learns the basic repairs of jewellery items supplied by college staff and students. Among the repairs are: ring sizing, chain soldering, broach pin catch soldering, soldering chorm brocelets, removing stones from simple settings and replacing, soldering spring rings and making bail.

JWL252 **Jewellery Repair**
In this course the student is taught how to test jewellery items for proportions of content (carat) of gold and silver, how to remove pearls from repair items, retipping of ring settings, engraving rings on shenks and general repairs supplied by the public.

JWL261 **Goldsmithing III**
Complete assigned compulsory projects which are designed and then executed using a combination of techniques. Every project has a set time limit and a predetermined completion date. Complete two wedding rings, one ring without and one with stone(s), one pair of silver earrings, one bracelet (sterling silver and other materials). Several designs are required for each project. Also make 10 rings, 10 pairs of earrings and 10 bracelets by one of the production methods.

JWL265 **Theory of Specialty**
Learn the principles of casting and the making of wax and ceromic molds, the industrial method of spruing and investing of wax models, firing of molds, centrifugal and injection wax casting, principles of alloying of gold and silver and the characteristics of gold alloys.

JWL271 **Goldsmithing IV**
Time limited projects for this course are one necklace or broach in 10k gold, one pair of earrings in 14k gold, one dinner ring in 18k gold and a line of fashion jewellery. The projects may be made by fabrication, inlay, repousse, casting, reticulation, alloying, anodising, roller printing, fusing, mokume, patinoing etc.

JWL275 **Theory of Specialty**
This course covers: fusing of filings into metal electroplating, different methods of acid etching, salt-soldering, shokudo (Japanese alloys), mokume gane, aluminum anodising, titanium, tantalum, niobium anodising and hard soldering in investment.

JWL277 **Gem Setting**
In this course the student is required to make thirteen practical projects. Among the projects are four and six claw single or multi-stone settings, bead raising, star cutting and star setting both ladies' and gents' rings.

JWL351 **Jewellery Repairs**
Course covers a comprehensive exposure to most real-life repair situations. Pieces of jewellery from the public are used to provide practice and instruction. Marking is based on a record of work undertaken during the regular class periods and a time-limited practical exam given at the end of each term.

JWL352 **Jewellery Repairs**
This course is a continuation of JWL351 and covers a comprehensive exposure to most real life repair situation. Pieces of jewellery from the public are used to provide practice and instruction. Marking is based on a record of work undertaken during the regular class periods and a time-limited practical exam given at the end of each term.

JWL361 **Goldsmithing**
Four major projects of student's design are developed in consultation with the instructor. The projects incorporate skills introduced in JWL365. The content of three projects is determined by the instructor, the fourth is chosen by the student and developed in consultation with the instructor. A final practical exam is given. All projects are retained by the department for exhibition until graduation and until all school materials have been paid for.

JWL365 **Theory of Specialty**
Course introduces a wide variety of techniques and concepts. Projects utilising the subject matter are often required. Subjects covered can include: hollow ring construction; family ring; eternity ring. Safety is a prime concern. Correct handling of materials and procedures are explained and the student will be required to follow these. Marking is based on a blend of the marks given for required projects and for the mid-term and semester-end written exams.

JWL371 **Goldsmithing**
Student executes four major projects of his or her own design, developed in consultation with the instructor. The projects will incorporate skills introduced in JWL365. The subject content of three projects is determined by the instructor. A final practical exam is given. All projects are retained by the department for exhibition until graduation and until all school materials have been paid for.

JWL375 **Theory of Specialty**
Course provides an introduction to wide variety of techniques and concepts. Subjects covered can include: hot forging and making simple steel chasing and repousse tools, shaping and fitting of gravers; platinum and palladium fabrication and finishing techniques; forging. Safety is a prime concern. Correct handling of materials and procedures are explained and the student will be required to follow these directions.

JWL411 **Theory of Specialty**
In this course the student learn the principles of design of various hand tools (grovers, pushers), the theoretical requirements for settings preparation, the various concepts and types of setting and where and how to use them for the type of setting practised in JWL418 course.

JWL418 **Gem Setting V**
In this course students learn to measure, cut, file, saw, and drill with specialized tools and equipment, shape and shorpen gravers, prepare a set of tools for gem setting work and work with flex shaft and a variety of burrs. The setting projects include setting solitaires, star cut bead setting, prong setting, several patterns of bead setting, bar tap setting, bezel setting, retipping prongs and pinpoint setting.

JWL421 **Theory of Specialty**
This course is designed to familiarize the student with a large variety of setting types, their specific characteristics, where and how to apply them and the theoretical requirements of each. The settings covered are those listed in the practical course JWL428.

JWL428 **Gem Setting VI**
This course covers: setting centre stones in prongs for the following shapes; octagon, oval, round, pear, heart, marquise; setting stones in "V" shape (heart, pear, marquise); baguette, channel, multiple channel, french bead, fish tail, pre-cut bead, pave and tension setting.

JWL466 **Jewellery Repair Practical**
Students learn shop safety procedures and injury prevention. The skills tought are: cutting, sawing with jewellers' saws, filing techniques, drilling techniques, use of pickling solutions and ultrasonic cleaning, soldering techniques, melting of metals, onnealing procedures, rolling mills, butting and lapping, plating, buffing, sizing rings with or without stones, retipping and replacing prongs, riveting and making settings out of tubes and out of wires.

JWL476 **Jewellery Repair Practical**
This course is the continuation of practical repair procedures. The student learns the skills of repairing chains, fabricating a link chain, making pins and catches fro pendants, making a box catch, making bezels for stone settings, repairing claws, making mounts for baguette stones, making cluster ring settings, etc.

JWL9150 **Jewellery Model Making I**
This course is offered through the Continuing Education Department. The student learns through theory and hands-on experience how to transfer design into wax carvings ready for castings. Design and model making problems are identified and analyzed through individual and class assignments.

JWL9200
A continuation of JWL9150.

KINE100 **Kinesiology I**
This course is centered around the skeletal, articular, and connective tissue structure of the human body. Emphasis is placed on the relationship of structure and function within the context human movement, joint stability and range of motion.

KINE102 **Kinesiology and Biomechonics**
Through a series of modules, the students develop on understanding of the introductory biamechonical concepts applied in clinical practice for orthotists and prosthetists.

KINE110 **Kinesiology II**
The specific areas of the body are studied as integrated functional units. The stability and mobility of joints are examined and implications are mode for movement design and safety.

KINE205 **Dental Kinesiology (Biamechanics)**
This course will examine the anotamy and physiology of the dentulous and edentulous mouth. Topics covered will include structure and design, force transmission and other physical and mechanical aspects.

LAB 104/114/203/213 O.P. Laboratory Procedures
Students receive hands on instruction and experience in fabrication procedures and technical set-up for the variety of prosthesis and orthosis seen in the Clinical Techniques course.

LAB106 **Complete Denture Construction**
This course is designed to introduce the student to the basic techniques required to construct complete dentures.

LAB305 **Specialty Pregraduate Lab Experience I**
Learn about orthodontics and the techniques required to fabricate removable and fixed orthodontic appliances at an advanced level with minimum supervision.

LAW102 **Legal Terminology**
A practical study of legal terms and concepts organized by legal subject areas, including constitutional, criminal, tort, family, contract, corporate, and property law, and civil procedure, caselow and statutes, focusing on the needs of the court reporter for quick comprehension and correct spelling and pronunciation.

LAW103 **Legal Terminology**
A practical study of legal terms and concepts organized by legal subject areas, including constitutional, criminal, tart, family, contract, corporate, and property law, and civil procedure, caselow and statutes, designed to familiarize the student with the nomenclature used within the legal community.

LAW104 **Distribution Monogement Low**
This course covers the major principles of Canadian law (federal and provincial) as they apply to physical distribution and includes the basic law of contract, tort law and liabilities, insurance law as it applies to the transportation of goods and the liability of common/private carriers.

LAW105
See LAW111

LAW110 **Contrad Law**
This course covers the five items required to make an enforceable contract and the results when there are problems.

LAW111 **Business Law/Real Estate**
This course introduces the student to the nature and origins of law and provides him or her with an understanding of statutes, the common law, equity, the court system, tarts, contracts, agency law and creditar rights.

LAW114 **Employment and Human Rights Law**
This course examines legislation existing and under consideration concerning human rights in the workplace, along with all other matters related to employment and its compensation.

LAW120 **Criminol Procedure**
An overview of the procedural rules for the conduct of a criminal law case, designed from the court reporter's point of view, with a focus on preliminary hearings, trials and appeals; legal terminology; titles, purposes, legal mandatory format of documents in a criminal case; roles and duties of courtroom personnel.

LAW202 **Business Law I: Law for Legal Secretaries**
A general survey of Canadian law, including both substantiative and procedural aspects, designed to complement the students' practical studies in legal office administration. Topics include criminal, tart, family and constitutional law as well as civil procedure.

LAW203 **Business Low II: Law for Legal Secretaries**
A continuation of the general survey of substantiative and procedural issues in Canadian law, dealing with contract law, real estate, wills and estates, landlord and tenant, employment law, corporate law, and human rights legislation.

LAW204 **Law and Security**
This course provides the hospitality student with a layperson's knowledge of law and specific knowledge of hospitality law, insurance, methods of protecting the security of guests, enforcement of house policies, and related legislation.

LAW214 **Legal Implications in Health Care**
A study of the Canadian legal system as it applies to hospitals and health records administration with a focus on pertinent legislation and caselaw. Topics include confidentiality and access to health records; risk management and quality assurance; consent to treatment; substitute consent, the law of negligence.

LAW218 **Civil Procedure**
An overview of the rules applying to courtroom procedure in the province of Ontario designed from the court reporter's point of view with a focus on the legal terminology used in courts, the titles, purpose and mondatory format of documents farming a case docket, and the roles and duties of courtroom personnel.

LAW301 **Health Care System, Jurisprudence and Professional Relationships**
This course provides an overview of the health system in the Province of Ontario and the law as it applies to the health care worker. The rights and responsibilities of employing agencies, the chirapodist and the patient are examined.

LAW302 **Contemporory Legal Issues**
An introduction for court reporters to the legal community in Ontario, including the police, trial and appeal courts, family and youth courts, coroner's court, special examiners officers, administrative tribunals, prisons and jails, and Queen's Park.

LAW501
See LAW506

LAW506 **Low and Insurance**
This course gives the hospitality student an overview of the Innkeeper's Act, other legislation and various codes and acts related to the hotel industry. It includes basic terminology used by legal counsel and various inspection agencies.

LAW 576
This course aims to give the student an understanding of the laws regulating the hospitality industry, mainly concentrating on laws related to the service of foods and beverages.

LETT101 **Lettering**
See SIGN550

LETT502 **Lettering and Typography**
History of lettering, current usage, terminology and current typefaces will be studied. Practical application in pencil, pen and ink, felt tip marker and instant lettering will be rendered.

LIBS105 **History of War-Port I**
This course studies the developments of war to the conclusion of World War I.

LIBS110 **History of War-Port II**
This course continues the history of war to include developments to the conclusion of World War II.

LIBS115 **Framing Reality: Film Documents**
Can film "capture" reality? This course will introduce the technologies and ideologies of a variety of film-making practices.

LIBS125 **Being Humon-Port I**
This course studies the psychological principles that affect everyday lifs. This course must be taken with LIBS130.

LIBS130 **Being Humon-Port II**
This course continues the study of human nature to cover sociology and philosophical thought. This course must be taken with LIBS125.

LIBS132 **Being Humon: Self, Society and Meaning**
This interdisciplinary course introduces the student to the foundations of psychology, sociology and ethics and serves as a basis for general education courses in the social sciences and humanities. The student will explore basic themes and issues related to self-development and public participation within the changing Canadian milieu, and develop the knowledge and generic skills required to deal with these changes and to influence their lives and environment in a responsible and meaningful way.

LIBS300 **Living with Dying**
This discussion-centred course examines the topic of dying and death using the frameworks of philosophy, psychology, sociology and everyday experience. The course explores the social, cultural and personal meaning of dying and death.

LIBS301 **Sociol Psychalogy**
This course focuses on how we think about influence, and relate to others. Social thinking deals with self-perception, attitudes and social beliefs. Social influence covers cultural sources of attitudes, conformity and persuasion. Social relations deals with aggression and altruism, prejudice and attraction, conflict and peace making.

LIBS700 **Introduction to Sociology and Human Relations**
This course introduces students to basic themes and issues of self development and public participation in the changing Canadian milieu. To develop the knowledge and skills they will require to deal with these changes and to influence their lives and their environment in a meaningful and responsible way.

LIBS702
See LIBS132

LITH100 **Machine Printing Offset**
This basic course covers the fundamentals of offset lithography using 10* x 15* presses, including feeding, register, dompening system, ink contral and running of one colour and two colour projects.

LITH110 **Machine Printing Offset**
Learn offset lithography on single colour Heidelberg, Harris, Miehle and Solna presses, good housekeeping and safety, lubrication, measuring instruments and devices for press operators, cylinder arrongements, bath alcohol and conventional dompening systems, inking and registering systems, and plates, paper and ink as related to the press operator, the operation of o single colour press running one and two colour projects.

LITH220 **Machine Printing Offset**
This advonced course in offset lithography on two-colour 29* Harris and 38* Miehle presses covers fundomentals of two colour offset lithography, feeding, register systems, ink systems, dompening systems, cylinder arrongements, press familiarization and theory and practical applications of two colour offset printing and four colour process project.

LITH230 **Machine Printing Web Offset**
The orientation and operation of the Solno Commercial III web offset press (36* x 22 3/4* cutoff), plate bending and packing procedure, press and folder familiarization and operation, web-up procedure, plate installation, domp-up and ink-up procedure, rolls stand tension contral and installing paper rolls and safety and good housekeeping. Projects run involve uniform colour, register and fold book signatures.

LITH310 **Machine Printing Offset**
One and two colour projects reproduced on book and coated stock. Special attention will be paid to all aspects of commercial work, particularly register and colour control using the densitometer.

LITH320 **Machine Printing Offset**
Cylinder arrangements for two colour presses, application of alcohol dompening and the use of the densitometer. Projects run during this course include two-colour and process work.

LITH330 **Machine Printing Web Offset**
Learn the make-ready and running of more complex projects. Course content covers press make-ready of one colour, two-sided with 1/2 fold, changeover to double web operat on as well as make-ready and running of double parallel fold with two colours on two sides. Projects involve uniform colour, register and folded book signatures.

LITH510A **Machine Printing Offset (Intermediate)**
See LITH110

LITH540 **Mochinery Printing (Offset Lithography)**
The teaching of the fundamentals of the lithographic printing process is the main emphasis of this course. Students will begin by printing single colour work; multi-coloured projects will involve single printing units and the use of the T-51 second colour unit.

LT506 **Advonced Listening**
Provides ESL students with knowledge of major language functions and corresponding techniques and vocabulary so that the student will accurately comprehend a wide variety of spoken English, including small talk, social communication, semi-formal and formal exchanges.

LT507 **Advonced Speaking**
This course is designed so that a student with adequate ESL speaking skills can learn and practice appropriate techniques related to major language functions, thus enabling the student to communicate with increasing effectiveness and confidence in non-controlled language environments.

LT508 **Advonced Reading**
For ESL students who can already comprehend brief reading exercises. The content includes dictionary usage, idioms and vocabulary building using prescribed lists and words from readings, and short articles to read in order to improve comprehension and personal vocabulary. Other readings will be studied and discussed for meaning and ideas.

LT509 **Advonced Writing**
For ESL students who have already mastered the major grammar rules and structure of English. The content includes instruction and practice in building complex sentence structure, writing basic daily journals and simple compositions, and constructive grammar and structure corrections. The emphasis is on developing fluency by choosing appropriate tenses, voice, word order and sentence patterns.

LT511 **Listening for Academic Purposes**
This course prepares students for the demands of academic lecture comprehension and note-taking. It teaches students how to listen to a lecture and take notes; how to use cues and conventions in lectures that indicate organization and emphasis; how to recognize redundancy, and how to predict the message of the lecture.

LT512 **Speaking for Academic Purposes**
This course prepares students for the varied language uses they will encounter daily in their academic careers. They learn strategies for speaking in academic settings so that they can interact appropriately. Students have the opportunity to practice academic English in a variety of activities, such as individual presentations and participation in group discussions and seminars or debates.

LT513
Reading for Academic Purposes
This course prepares students to read and understand material at the college level. The course includes instruction and practice vocabulary building, explicit and implicit comprehension, and critical analysis. Time is also provided for improving reading speed and increasing grade level. A large component of the content comprises information on Canadian background and culture with excerpts from magazines, newspapers, business texts and technical courses.

LT514
Writing for Academic Purposes
Learn to write at the college level. Time is allotted for development of computer skills using WordPerfect software and other programs designed to improve English structure. The course contains a comprehensive review of grammar, spelling and punctuation. Also included are library research skills and organizational patterns needed to develop social/business correspondence, essays and reports.

LTPR101
Machine Printing (Letterpress and Narrow Web Flexography)
Learn letterpress and flexographic printing processes, hot foil stamping, embossing, die cutting and numbering. gain an understanding of packings, letterpress inks and common problems which would be encountered in a shop situation, general maintenance and good housekeeping, running a narrow web flexo label press, with emphasis on tensions, inks and compatibility to stocks and the use of dies.

LTPR300
Die Cutting/Embossing/ Narrow Web Flexo
Following a review on platen presses as required, the course covers die manufacturing processes, die cutting and creasing, perforation, slot cutting, plate sinking, hot and cold embossing and foil stamping.

LTPR539
Machine Printing (Letterpress & Narrow Web Flexography)
The study of the letterpress and flexographic printing processes. Students will gain an understanding of packings, letterpress inks and common problems which would be encountered in a shop situation.

MACH104
Machining Fundamentals
Learn the basic fundamentals of machine shop practice, machine shop safety, use and operation of hand tools, drill presses and tools, cutting tools and lathe theory, use of milling machines, and grinding theory.

MACH105
Machining Fundamentals I
Learn the basic fundamentals of machine shop practice, machine shop safety, use and operation of hand tools in a machine shop, application of drill presses and tools, milling machine, abrasives and grinding wheels, cutting speeds and feeds, cutting tools materials, lathes, metal classifications.

MACH106
Manufacturing Processes
Learn about materials, processes, quality assurance, metal cutting, assemblies, philosophies of manufacturing, engineering and the environment.

MACH205
Computer Aided Design/Drafting
After initial introduction and theory lectures, follow an individually paced program, in the form of module projects using AutoCAD software, designed to highlight the course content. Gain on introduction of microcomputers, basic DOS commands, two-dimensional geometry, blocks, file management and utilities.

MACH205
Computer Aided Design/Drafting
The basics of computer-aided 2D drawing to advanced 3D design drafting and editing using UNIX-based ICEM software. Gain practical experience by completing module projects drawn to ANSI Drafting Standards.

MACH206
3D Advanced Smart CAM/APT
Learn to develop and apply the principles covered in course 2D Intermediate SmartCAM. The student will expand the use of programming tools and aids to increase programming efficiency in the completion of complex manufactured parts. The course allows the student to build practical experience upon a theoretical base through the completion of assigned projects. Prerequisite: 2D Intermediate SmartCAM.

MACH206
Computer Aided Manufacturing
The course is designed to develop and apply the principles covered in the previous 2D Intermediate Smart CAM. The student will expand the use of programming tools and aids to increase programming efficiency in the completion of complex manufactured parts. The student will be introduced to the concepts of Computer Aided Manufacturing. The course content is presented in such a manner to allow the student to build practical experience upon a theoretical base through the completion of assigned projects.

MACH206
Computer Aided Manufacturing
The course is designed to develop and apply the principles covered in the previous 3D Advance SmartCAM. The student will expand the use of programming tools and aids to increase programming efficiency in the completion of complex manufactured parts. The student will be introduced to the concepts of Computer Aided Manufacturing using A.P.T. software. The course content is presented in such a manner to allow the student to build practical experience upon a theoretical base through the completion of assigned projects.

MACH214
Diemaking
The theory and practical subjects covered in the course are as follows: die materials; die parts; types of dies; types of press-tool dies; press calculations; types of presses; cutting theory and calculations; blank development and calculations; draw and bending die theory and calculations; die fits; standard parts from catalogues; operator safety and cost efficiency; constructing a basic press-tool die and setting up a punch press; developing a port to acceptable standards and principles of die design.

MACH226
Mechatranics II
Mechatronics II is a highly lab oriented course for the design of automated devices and automated systems. Practical examples will be discussed, and with the integration of all technologies studied previously, design assignments will be done by the student.

MAIN113
Maintenance Theory
This course familiarizes the student with building structures, systems and components requiring preventative remedial or emergency maintenance, contract systems, contract tendering and administration for commercial, residential, industrial and mixed use properties.

MAN104
Management Theory I
This course introduces the theory and practice of management in the Canadian context. Emphasis is placed on organizational culture and environment, decision making, planning, motivation, leadership and communication skill.

MAN114
Management Theory II
This course presents human resource management and the control process, legislation affecting HRM, performance evaluation, departmental budget preparation and social responsibility and ethical considerations.

MAN200/203
General Management I and II
Students will understand and be able to demonstrate basic management skills in an office environment. Topics include: current management theories, motivation, delegation, team-building techniques, communication, coaching staff, effective meetings.

MAN201
Money Management and Banking
Emphasis in this course is on student understanding of capitalization for the different forms of business ownership, bank loan negotiation tools, government financing, tax considerations for money management, budgeting and control of assets and liability.

MAN202
Internal Business Management
Students are required to demonstrate an intimate knowledge of management by objectives in relation to the successful management of a small business. As well, they will gain a working knowledge of recruiting, hiring, training, motivating, evaluating and promoting of employees.

MAN204
Fundamentals of Management
This course gives a realistic picture of a manager's job and the changes introduced over the past few years. It points out the skills that managers must apply to achieve crucial goals and performance standards. It also shows that managing within an organization is a mixture of intuitive and scientific decision-making judgement, the application of skills and the performance of various roles.

MAN212
Operations Management Applications
This course will combine the theoretical and practical knowledge necessary to function effectively in the fashion and apparel industry. Emphasis is put on solutions in product planning, scheduling, manufacturing and distribution methods as a management function. There will be extensive use of computer software and project management techniques.

MAN214
Management Theory II
This course refines techniques of managerial planning, organizing, controlling and directing in health care settings. Areas covered include problem analysis, job design, delegation, committee work, departmental budgeting and proposal writing and presentation.

MANG300
Small Business Management
This course covers the basic elements concerned with managing a small business. The course covers the business considerations that are involved in administration of a Dental Laboratory.

MARK100
Introduction to Marketing
This is an introductory course in the philosophy, theory and application of modern marketing concepts, principles and techniques. The student will examine the contribution of marketing to society as a whole and the role and functions of the marketing department in a business or non-profit organization. Important topics include the marketing environment, consumer behaviour, market segmentation, market targeting, positioning, and the development of the marketing mix (product, pricing, promotion, and distribution strategies).

MARK101
Professional Presentations
Persuasive presentation skills-whether for a product, service, idea, issue or one's own viewpoint-are essential for success in business. The emphasis in this course is on the "Need Satisfaction Selling System" as a model for developing, preparing, and executing presentations designed to satisfy identified customer needs. The course makes extensive use of role playing, audio-visual aids, prepared work, and video taping to develop professional selling skills, and introduces basic record-keeping.

MARK102
Advertising Management
This course is designed to teach students how to analyze a marketing situation and write a formal advertising plan with appropriate recommendations. Topics include customer, product and market analysis; product positioning; advertising objectives; creative strategies; media strategies and execution; control and evaluation. Working in small groups, students write a plan to solve the problems of a complex marketing case study.

MARK105
Marketing I
In this course, the hospitality management student will explore the basic principles of marketing and their application to the hotel business.

MARK110
Sales Pramatian
The student will conceive, design and recommend appropriate sales promotion and/or publicity strategies, based on the marketing background and goals of specific clients-local firms, College organizations, the School of Business, etc. Specific topics include news releases, publicity events, twelve basic sales promotion techniques, point of purchase materials, legal considerations, and how to judge the effectiveness of these activities.

MARK112
Marketing
Marketing involves the study of the 4 Ps and how products or services can be successfully designed and sold in the marketplace.

MARK113
Marketing Taur Business
An introductory course in modern marketing. Topics include consumer and Industrial market segmentation (identification of needs, market size, trends); interrelationships between consumer and company goals, environmental factors and the marketing mix (product, price, distribution and promotion); and marketing research. Students will be assessed on their ability to demonstrate an understanding of the market system.

MARK200
Product Planning and Pricing Policies
This course covers strategies leading to new product marketing decisions including product planning and development and product strategies as well as branding, packaging and labelling. It also includes customer and company consideration in determining product pricing for greater profits. This course includes both texts and a major industry project. The student may use the personal computer for cash flow analysis.

MARK201
Marketing Channel Organizations and Systems
This course concentrates on the operation, policies and marketing management of wholesalers and retailers with particular emphasis on retailers. It then shifts emphasis to consider the channel as a sales system from manufacturer to end user, to identify conflicts and maximize efficiency. This course includes both texts and major project or projects.

MARK202
Marketing Research and Inframation Systems
Utilizing text, cases and a major project, this course provides practical experience in estimating the value of information, defining the information required for decision-making, developing appropriate research methodology and sampling, data collection, analysis and presentation of findings. The student uses the personal computer to tabulate data.

MARK203
See MARK105

MARK204
Public Relations and Publicity
This course defines and explains the role of P.R. for the firm. Topics include the preparation of news releases for all media, running of press conferences; development of effective campaigns to stress various aspects of products, individuals and the corporate image and the handling of all aspects of external communication by the firm, other than paid commercial messages. The course uses text, cases, and an industry project.

MARK205
Strategic Planning
This course, with MARK106, interrelates elements of the marketing mix that were studied saporately in previous semesters, by comparing various strategies and their underlying causes, and relating these to company objectives. MARK205 pays particular attention to product, price and marketing planning and strategy. This course uses text, cases and oral and written presentations.

MARK206
The Consumer and Competitive Environment
This course provides an intensive survey of management decisions relating to buyer behaviour, distribution and promotional strategies. The study of real company cases will provide the student with a deeper understanding of business problems in these areas. This course uses text, cases and oral and written presentations.

MARK207
Quantitative Marketing Analysis
In this quantitative approach to marketing analysis and decision-making students apply a variety of packaged programs on the computer, including forecasting, regression correlation, sensitivity analysis and linear programming. Other topics include an introduction to computerized MIS, analysis and optimization of the firm's marketing resources and a computerized marketing simulation.

MARK208
Marketing II
In this course, the hospitality management student will continue to study marketing, especially food and beverage advertising, sales promotion, public relations, personal sales and menu preparation. Students will work in small groups and create a plan for an event related to the hospitality industry which will take place at the college campus for the benefit of the entire student population. Prerequisites (preferable, but not essential): MARK105, MARK203.

MARK208
Fundamentals of International Marketing
The business student in this course will cover: the world's economic environments; the varied cultural environments; the political and legal environments; marketing to the world; international product policy; distribution; international promotion; pricing in international markets; market planning and the organization and control of international marketing.

MARK209
Marketing III
The emphasis of this course is on the completion of the marketing plan for a hotel for one full calendar year. This hotel will be targeted as your final semester management project for Financial Management and Front Office Operations. Prerequisites: MARK208 (Culinary Management), MARK208 (Food and Beverage Management)

MARK211
Advertising and Sales Pramatian
The purpose of these courses is to provide knowledge and competence in the marketing strategy for residential and commercial properties including marketing research, marketing segmentation, consumer behaviour, promotional methods and public relations.

MARK212
See MARK211

MARK216
Marketing Your Business
The student will be assessed on his or her ability to demonstrate an understanding of the market system and the steps required to ensure successful marketing of a product or service. This includes consumer behaviour, marketing strategy, product management, promotion and pricing.

MARK219
Service Marketing
This course will focus on the marketing of a service business with particular emphasis on the marketing of a small service business. Some topics covered are market research, planning promotion, pricing, after sales service and consumer behavior.

MARK300
Industrial Marketing Management
Following a review of the unique aspects of marketing to industrial users, the course focuses on activities and problems encountered in the management of industrial marketing. Major topic areas are illustrated and discussed through the case method, while a competitive computer simulation provides an overview and illustrates the financial impact of various strategies.

MARK301
Marketing Information Systems
This course is designed to familiarize marketing students with data processing techniques and to develop skills required for the analysis and design of computerized information systems. Concepts will be reinforced through the use of case studies and computer practice.

MARK302
Marketing Management for Service Industries
From banks to fast food to non-profit organizations, service accounts for forty percent of the consumer dollar and fifty percent of non-government employment, and is growing. This course focuses on those unique properties of profit and non-profit service organizations, to illustrate how they frequently lead to problems and solutions that are not typical of product marketing. Cases and industry projects will be used

MARK303
Marketing Law
The course surveys laws and regulations that affect marketing, as enacted by all levels of government; self-regulation of industry; and trends in Canada and abroad that could influence marketing activities in the future. While regulatory material is too broad to cover in its entirety, each student is encouraged to become expert in a specific area of interest.

MARK576
Marketing and Merchandising
This course provides the student with a basic understanding of marketing in a hospitality operation, and how all aspects of the operation contribute to its marketing.

MATH106
Mathematics
This course is a review of symbols, factoring, fractions and laws, linear equations, solution of two and three unknowns by determinants, elimination and substitution, exponents and radicals, solution of quadratics by factoring, square completion and formula, ratio, proportion and variation and graphs: co-ordinate systems and plotting functions, extrapolation of graphs, and interpretation of "bar" and "pie" graphs.

MATH114
Mathematics of Finance I
This course will teach the student to carry out basic financial calculations and to analyze mathematical aspects of business problems in a logical manner. Topics in commercial mathematics include breakeven analysis, trade and cash discounts, simple and compound interest, promissory notes and loan repayment schedules.

MATH115
Mathematics of Finance II
This course will provide a further understanding of financial mathematics. Topics covered include both simple and general annuities, amortization, sinking funds and bonds.

MATH116
Mathematics for EDP
This course teaches the student the basic mathematical calculations required for data processing. Topics covered include binary, octal, and hexadecimal arithmetic, sets, logic, Boolean algebra, solution of equations by Gaussian row reduction and matrix calculations.

MATH117
Mathematics
This course covers review of basic operations, fundamental laws of algebra, equations and formulae, whole number exponents and simple roots, scientific notation, operating calculators, functions, graph of a function, graphs from experimental data, application, load line, linear equations, algebraic solution of linear equations, solving linear systems by determinants, applications to electrical technology, trigonometric functions, right triangle with applications, ratio and proportions, variation, factoring, quadratic equations, solution by completing the square and quadratic formula.

MATH121
Statistical Methods
Students will learn how to describe terms used in descriptive statistics, organize data, compute measures of central tendency, compute measures of variability, pool data from different samples, and compare data drawn from different populations.

MATH125
Mathematics of Merchandising
Upon completion of this course, the student will be able to develop a mathematically oriented merchandise plan that will meet company profit objectives. Topics include discounts, markups and markdowns, stock planning, turnover and sales planning.

MATH127
Mathematics
This course covers vectors and oblique triangles, applications of vectors, sine and cosine law and their application to electrical technology, 1operator, complex numbers, basic operations with complex numbers, polar form at complex numbers, application to A.C. circuits, graphs of trigonometrical functions, phase angles, composite trigonometric curves, equations of higher degree, remainder theorem, factor theorem, synthetic division, rational and irrational roots of an equation.

MATH131
Mathematics (Graphics Arts Related)
This course is designed to provide basic skills in mathematics to enable the student to handle formulae relating to graphic arts practice; to produce and interpret graphs resulting from empirical data related to the cost and production of printed material; and to be familiar with the units and practice of copyfitting and paper stock.

MATH132
Mathematics (Graphic Arts Related)
This course provides further skills in algebra and trigonometry. The topic of vectors is introduced as an aid to the physics course.

MATH139
Mathematics
This course reviews basic mathematical skills and covers financial calculations involving applications of compound interest and annuities, stocks and bonds.

MATH141
Mathematics
This course introduces the basic notions of algebra and trigonometry. We apply these to the solution of practical problems in electronics. The fundamental concept of a "function" is stressed. Only basic arithmetical skills are assumed known to the student.

MATH142
Mathematics
A continuation of MATH141. This course covers radical equations, trigonometric identities, and an introduction to calculus. In the latter part, limits, derivatives of algebraic functions, minimum and maximum tests and practical applications are covered.

MATH148
Mathematics
This course provides a basic knowledge of mensuration, ratios and percentages, merchandising practices, simple and compound interest and ordinary annuities.

MATH151
Mathematics
A lab component using Math CAD (available in the CAD room network) is part of this course, which follows MATH141.

MATH152
Mathematics
This course continues the study of the foundations of mathematics. We see math as both a language and as a way to develop critical thinking skills. These skills are developed through the solution of critical problems. We begin the study of calculus, one of mankind's greatest achievements.

MATH155
Business Mathematics I
This introductory business mathematics course reviews basic arithmetical skills and covers residential and commercial property taxes, business taxes, income tax and simple interest calculations.

MATH156
Mathematics
This course covers property, life and car insurance; merchandising mathematics including markup, markdown and discounts; foreign exchange transactions; and compound interest.

MATH166
Applied Mathematics I
This course includes: fundamental concepts and operations; a brief review of basic geometry; trigonometric functions of any angle; solution of triangles; factorization in algebra with applications to fractions and equations; and quadratic functions and equations.

MATH167
Mathematics
This course includes: systems of linear equations; some systems of non-linear equations and the solution of certain types of equations; exponents and radicals; and exponential and logarithmic functions.

MATH168 Mathematics and Applied Mathematics for Pianos
The piano technician student will caver the mathematics required to da the calculations required in PHY133.

MATH176 Applied Mathematics II
This course cavers: proportian and variation problems; quadratic equations; trigonametric functians at any angle; vectars and oblique triangles; exponents and radicals; canic sections; and applicatians to financial equatians.

MATH183 Calculations
The course will provide the learner with the ability to salve mathematical problems related to renavatian canstructian. The course will caver basic mathematical aperatians, systems af measurement, perimeter, area and volume and basic algebra and trigonametry.

MATH185 Descriptive Trade Geometry
The course will provide the learner with the ability to salve mathematical problems related to renavatian canstructian. The course will caver basic mathematical aperatians, systems af measurement, perimeter, area and volume and basic algebra and trigonametry.

MATH204 Introduction to Epidemiology
This course includes measures of disease accurrence, measures of association, measures of risk, saurce af errar, data information saurces, disease causation, and a review af study designs.

MATH206 Mathematics
This course cavers analytical geametry. Included are: plotting graphs by using the proper co-ordinates; algebraic expanential and logarithmic functions; equations of higher degree; remainder and factar theorem; rational and irrational roots; and progressions.

MATH211 Hospital Statistics
This course covers rates and proportions, data collection, statistics review and report writing.

MATH213 Medical Statistics
The student will learn how to define and compute rates commonly used in vital statistics, analyse data from observational and analytic studies using X2-student-t, F-Test, Linear regression and ANOVA, prepare quarterly reports on utilization of hospital resources, and prepare critiques on statistical reports.

MATH214 Statistics I
At the end af this course, the student will be able to identify some good uses and some abuses of statistics, read and present data in a variety of graphs and tables, select appropriate sampling techniques, calculate measures of central tendency and dispersion and salve problems using either normal or binomial probability models.

MATH215 Statistics II
This is a continuation of MATH214 and covers statistical inferences and estimation, hypothesis testing, CHI-Square test, linear regression and correlation, and time series. Successful completion of MATH214 and 215 is equivalent to MATH255 and will enable the student to proceed directly to MATH267, the B- grade requirement for CGA exemption still applies.

MATH219 Service Marketing
This course will focus an the marketing of a service business with particular emphasis an the marketing of a small service business. Some topics covered are market research, planning promation, pricing, after sales service and consumer behavior.

MATH221 Statistical Methods for Medical Science
This course covers probability distribution, sampling distribution, hypothesis testing, regression and correlation analysis, analysis of variance and covariance and non-parametric methods.

MATH222 Applied Mathematics III
This course covers trigonametric identities and equatians; rotatian and translatian of axes; polar co-ordinates; fundamentals of analytical geametry in three dimensians; polynamial functians and equations; Descartes Rule; Newtan's method; interpretive techniques; probability; frequency distributians; measures of dispersion; method of least squares; curve fitting.

MATH223 Industrial Mathematics and Statistics I
This course builds on the mathematical principals covered during the first two semesters by the introduction of advanced theory and the use of problem salving on practical applications. The course will include the following topics: Introduction to analytical geometry; salving af 2 dimensional geometric figures; salving of 3 dimensional geometric figures; statistics.

MATH226 Industrial Mathematics and Statistics II
This course builds an the mathematical principles cavered during the third semester by the intraduction af advanced theary and the use af problem salving af practical applicatians. The caurse will include the fallawing topics: Introduction to differential calculus; Differentiation and Integration; Intraduction to differential Equations; Statistics.

MATH227 Mathematics
Expanential and lagarithmic functians, properties af lagarithms, lagarithmic and expanential equations, fundamental trigonametrical identities, sine and cosine af the sum and difference af twa angles, double angle and half angle formulas, trigonametric equatians, inverse trigonametric functians, straight line, circle and parabala, polar coardinates, Boalean algebra, binary and decimal number systems, symbalic logic, logic variables and aperatars, truth tables and functian maps, application to circuits, limits, derivatives, differentiatian af algebraic functians.

MATH230 Applied Mathematics IV
Concept of a limit; definitian af the derivative as a limit, differentiatian af algebraic and non-algebraic functians, applicatians to analytic geametry and maxian analysis, maxima and minima with applicatians to practical problems, area under a curve, concept af integratian, integratian af algebraic functians, definite and indefinite integrals with applicatians.

MATH231 Mathematics
This course requires problem salving invalving all trigonametric ratias, plotting rectangular and polar co-ardinates and applying the plats to calaur circle problems.

MATH232 Mathematics
This course intraduces the student to computer programming and salving problems in basic estimating for printing and related costs, as well as developing a computer programme of the cast centre application to a hypothetical printing plant. The course cavers statistical methods for quality assurance and cantral in a variety of systems within the printing industry.

MATH233 Applied Mathematics III
The course covers trigonometric identities and equations; polynomial functions and equations; Descartes Rule; rational and irrational roots; Newton's Method; concept of limit and continuity; definition of derivative; techniques of differentiation; applications of differentiation to Analytic Geometry and Mechanics, curve sketching; applied maxima and minima problems; and related rate problems.

MATH234 Applied Mathematics IV
This course looks at definite and indefinite integrals. Applications are length, area between curves, volumes, velocity, acceleration, centroids, moments of inertia, radius of gyration, work, fluid pressure, average value of a function. Also covered is probability and statistics, which includes data analysis, frequency distributions, measures of central tendency, measures of dispersion.

MATH236 Mathematics
This course covers analytical geometry, line, circle, parabola, ellipse, hyperbola, transfarm af axes. Practical applicatians are included.

MATH237 Mathematics
This course covers differentiation of power functions and implicit functions, tangent and normals, related rates, applied maxima and minima problems, indefinite integral, definite integral, area under a curve, application to areas and waveforms, numerical integration, application to electrical technology.

MATH237A Mathematics
Trigonometric identities, sine and cosine of the sum and difference of two angles, double angle and half angle formulas, trigonometric equations, straight line, circle, limits, derivatives, application of derivatives, related rates, applied maxima and minima problems, differentiation of power functions.

MATH241 Mathematics
A continuation of MATH142. The study of calculus is extended, culminating in the Fundamental Theorem of Calculus. This course covers derivatives of trigonometric and transcendental functions, indefinite and definite integrals, area and volume integrals, averages and RMS, and techniques of integration.

MATH248 Mathematics
This course covers analytical geometry, differential calculus, differentiation, practical applications, integration, the definite integral, areas under curves and volumes. Differential equations are introduced. Practical applications are included.

MATH251 Mathematics
See MATH241. A laboratory component is also included.

MATH253 Optimization
This course will introduce the student to a systems approach to salving business problems using mathematical models. Topics include inventory control under certainty and under risk, decision trees, and markav models.

MATH255 Quantitative Methods I
This course is a rigarous introduction to statistical theory and methodology. Topics include probability, the normal distribution, sampling, estimation, hypathesis testing, and Bayesian decision analysis. It is af particular interest to the accounting student planning to pursue CGA accreditation.

MATH262 Mathematics 3
This course will include the fallawing: Basic fundamental concepts and operations, brief review; metric system, units, conversian, plane geometry, trigonametry, algebra and salving linear equations, simultaneous equations, determinants and exponents and radicals. Prerequisite: MATH176.

MATH267 Quantitative Methods II
This course is a continuation af MATH255. Topics include regression, time series analysis and index numbers, analysis of variance and linear programming. Microcamputer software will be used to illustrate concepts. Completian with a grade af B- or better will qualify the student for an exemptian from the CGA's QM2 requirement. Prerequisite: MATH255 or equivalent (MATH214 is insufficient preparatian for this course).

MATH272 Mathematics 4
This course will include: study af limits, derivative af standard expressians, derivative af powers and implicit functians, maximum and minimum problems, the indefinite integral, trapezoidal rule, areas and volumes by shell method, centroids and applications. Prerequisite: MATH262.

MATH301 Mathematics
This course covers limits, differential, the applications of the derivative, curvilinear matian, related rates, and curve sketching. Other topics include integration, how to define and integrate integrals, numerical integration, applications of integration, mensuration, and the average value of functians.

MATH307A Applied Statistics
This course will include: intraduction to probability, organizing data, fitting curves to data, data presentation, normal curve sampling and estimation theary. Prerequisite: MATH236 and MATH248.

MATH321 Mathematics
This course covers review of differentiation and integration, methods of integration, logarithmic, expanentiol, trigonametric forms, inverse trigonometric forms, integration by parts, integration by trigonametric substitution, integration by partial fractians, expansion of functions in series, MacLaurin series, Taylor series.

MATH322 Mathematics
Course includes Fourier series and their application to electrical technology, differential equations, separation of variables, integrable combinations, linear differential equations of first order, linear differential equations of the second order, applications, Laplace Transforms, application of Laplace Transforms to electrical problems and electrical technology.

MATH357 Applied Statistics
This course covers descriptive statistics, probability, and probability distribution.

MATH351 Mathematics
An advanced mathematics course for technologists. The course explores applications of the derivative and integral to series approximations (Taylar, MacLaurin, Fourier), solutions of differential equations using classical techniques, and the Laplace Transform method. A strong background in calculus (Math251) is required.

MATH358/360 Applied Mathematics V
Trigonometric identities and basic trigonometric formulae; differentiation of non-algebraic functions (trigonometric, inverse trigonometric, logarithmic and exponential); applications to curve sketching, related rates and max-min problems; methods of integration (power formula, logarithmic, exponential and trigonometric forms, integration by parts and by substitution); use of tables; applications to mensuration and mechanics.

MATH368/369 Applied Mathematics VI
Expansion of functions in series (MacLaurin and Taylor's series, Fourier series); differential equations; separation of variables, first and second order differential equations (homogeneous and non-homogeneous); solving differential equations by Laplace Transforms.

MATH508 Mathematics
This course is a combined instructional and refresher course in the application of basic mathematical techniques required by the apparel and related industries. The application of mathematical data in computing rates, profit markups, markdowns, discounts, percentile factors and the various formulae for use by industry participants are taught.

MATH513 Mathematics
Hone the skills developed in basic algebra. It includes basic properties, linear equations and inequalities, exponents and polynamials, quadratic equations, and systems of equations.

MATH519 Mathematics
The basic course in numeracy and calculations in whole numbers.

MATH523 Mathematics
This course is the fourth in a series designed to enhance and apply the skills developed in MATH513. It includes canic sections, relations and functions, logarithms and trigonametry.

MATH529 Mathematics
Develap basic mathematical skills, basic calculations af whole numbers, fractions, decimals, percent, ratia and praportion, and measurement.

MATH531 Mathematics
Develap basic algebra skills,the language af algebra, linear equations, palynamials, factaring, and systems af equations.

MATH533 Mathematics
The application of square root, percentages, interest, measurement, weights and measures, the right angle triangle, trade algebra and metric conversions, business, mathematics, sales, commission, banking, wages, salary, payroll and record-keeping.

MATH534 Mathematics
This course reviews the basic arithmetic skills to ensure that the student is capable of doing the technical mathematics related to furniture production and design. Topics include whole number, fractions, decimals, percentages, ratio and proportion, perimeter, area, volume and board feet. Basic trigonometry applied to right angle triangles is included. Special emphasis is placed on problem solving and dimensional analysis.

MATH535 Mathematics
This course reviews the basic arithmetic skills to ensure that the student is capable of doing the technicol mathematics related to upholstery and woodworking. Topics include whole number, fractions, decimals, measurement, percent, ratio and proportion, perimeter, area, volume and board feet. Practice is given in using grids to maximize use of materials in the cutting process.

MATH537 Mathematics
Mathematical problems related to operating a small business, the basics af bookkeeping, application of percentages in commercial discounts, simple interest, instalment purchases, payrol deductions, T-accounts, preparing income statements and balance sheets.

MATH538 Mathematics
The applications of square root, percentages, interest, measurement, weights and measures, the right angle triangle, trade algebra and metric conversions, business mathematics, sales, commission, banking, wages, salary, payroll and record-keeping.

MATH539 Mathematics
Trade-related business mathematics, profit, loss, discounts, interest, annuities and bookkeeping; practical geometry; trade-related formulae and equations; an introduction to trigonometry, problems with canes, tapers and proportions, circle square and triangle; ratio and proportion.

MATH548 Mathematics
Fundamentals concepts and operations; a brief review of basic geometry; trigonometric function of any angle; solutions of triangles; factorization in algebra with applications to fractions and equations and quaratic functions and equations.

MATH552 Technical Mathematics
Basic skills in mathematics to enable the student to handle formulae relating to Graphic Arts practice; to produce and interpret graphs resulting from empirical data related to the cost and production of printed material; and to be familiar with the printers' measurements.

MATH554 Business Mathematics
This course focuses an mathematical problems related to operating a small business. Considerable attention is given to the basics af bookkeeping. Topics include application af percentages in commercial discounts, simple interest, instalment purchases, payroll deductions, preparing income statements and balance sheets.

MATH561 Mathematics
This course will enable the student to salve trade related calculations by applying the Pythagaroen Theorem. Also included will be a review af temperature conversians, kinds af triangles, and measurements af angles and degrees.

MATH561 Mathematics
This course cavers percentage, simple interest, profit and loss, discaunt, tax, laans and financing. Ratian, praportian, direct and inverse praportian, gear speeds, pulley speeds, and flaw ratias are also studied, as well as pipe capacities, crass sectional area, flaw in pipes, and trade problems as applicable.

MATH579
See MATH155

MATH586
See MATH156

MATH700 Mathematics for Pre-Health
This course prepares the student for entry into a past-secandary, health-related program and provides a background in basic mathematics. Students learn some applied skills related to the health sciences, such as the preparation af solutions and dasages.

MATN403 Maternity Newborn Nursing - Theory
This theory course develops basic knowledge, skills and attitudes necessary to care for mothers and their families during the maternity cycle.

MATN411 Maternal Newborn Nursing - Practical
This course offers a practical opportunity to apply knowledge, skill and attitudes learned in MATN403 in the nursing care of maternity patients.

MC533 Practical Meat Cutting
It is in this course that the student learns the essential skills of the trade; how to break down and cut meat in a competent manner; and how to use the trade's many tools and pieces of equipment safely and efficiently.

MC1533 Trade Theory
This course provides the theoretical background necessary to the student to cut and merchandise meat for a grocery store meat department. The theory learned in this course is applied in MC533.

MECH100 Mechanics
This course introduces forces and basic principles of mechanics, equilibrium, shear force and bending moment diagrams, applications of equilibrium, friction and properties of areas and solids.

MECH105 Engineering Science
Properties of matter, mass, weight, specific weight, specific gravity, velocity and acceleration will be reviewed. Pressure and heat concepts will be dealt with in detail. Friction will be expanded to include lubricated surfaces. Machines and characteristics of machines are discussed. Fluidics and instrumentation will receive an elementary introduction.

MECH111 Mechanics of Fluids
This course includes basic fluid properties, types of fluids, fluid pressure and resulting forces, pressure units, forces on submerged plane and curved areas, buoyancy and stability, flow of fluids, viscosity, laminar and turbulent flow, equations of continuity and Bernoulli, energy losses due to friction, practical applications on all the above topics.

MECH119 Engineering Design Theory II
This course will build on the principles covered in Engineering Design Theory. On completion of the course the student will be able to apply conventional drafting standards and principles to create fully annotated engineering drawings of various mechanical details. The course will include the following topics: functional assembly drawings; bills of materials; call-up of parts; auxiliary views; fabricated assemblies and sub-assemblies; weld symbols; drawing office procedures; to complete a full set of engineering drawings; part drawings.

MECH120 Mechanics
This course studies stress and deformation, materials testing, tarsion, beams, beam stress, beam deflection, cambines stresses, columns, joints and moment distribution.

MECH203 Mechanisms
Course includes linear motion, angular motion, curvilinear motion, velocity and acceleration diagrams af mechanisms and lubrication theory.

MECH208 Mechatranics I
The student will learn in a heavily lab oriented class environment about functional mechanical components/assemblies which are closely related to automated devices, such as: mechanical power transmission and die design. Advanced manufacturing technology, their methods, terms and applications will be discussed as well.

MECH210 Material Properties
The student will learn in this course about the basic properties of materials and their use in systems. Strength of materials, stress loading, elastic buckling will be analyzed. Calculations and practical applications to identify industrial needs.

MECH212 Dynamics of Machines
This course is designed to teach the students the kinematics and dynamics of machines and their components. Mechanisms, their design and standard components are discussed for future application.

MECH217 Control Technology I
This course is developed to provide wide knowledge in pneumatic and electro-pneumatic control engineering for the design, troubleshooting and creating industry related control circuits. Lectures in theory with large amount of practical exercise.

MECH228 Control Technology II
As the continuity of Control Technology I, this course will introduce Programmable Logic Controllers (PLCs). With the combination of energy media, control systems and be reviewed, and further application of actuators, sensors, processors and softwares will be discussed for the design of controls in different industries.

MECH330 Theory of Structures
The various loads acting on a building and their effect on structural design are analysed in this course. Particular emphasis is placed on analytical and graphic analysis of structural elements.

MECH331 Building Engineering
this course builds on the concepts explored in MECH330. Topics include structural steel and reinforced concrete structural design.

MECH332A Theory of Structures
The various loads acting on a building and their effect on structural design are analysed in this course.

MECH351 Mechanics of Fluids
This course looks at properties of fluids, fundamentals of fluid flow, flow in pipes with friction loss, looping and branching pipe flows, open dam flow, forces developed by moving fluids and fluid machinery.

MECH362 Theory of Structures
This course reviews non-destructive testing of materials; structural analysis of statically determinate and statically indeterminate structures including deflection computation of beams and trusses; analysis of building bents and frames.

MED219 Sports Medicine
This course is designed to give the student an understanding of various aspects of sports injuries. This will include etiologies, pathologies, managements, and the factors influencing the treatment of the athlete.

MEDI202 Media and Techniques I
This course introduces the student to the use of still and video photography in graphic design and advertising. Through a series of lectures, demonstrations and short assignments, it traces the historical development of the photograph as a means of bringing verisimilitude to the printed page as a convincing presentation of merchandise, foods and fashions. The course discusses black and white and colour film, print quality, lighting, retouching and effective cropping.

MEDI305 Media and Techniques
This course enlarges upon the use of photography, film, TV and video through examination of the role of the art director from concept to production. The student is encouraged to use photographic and video equipment to probe individual creative resources. Emphasis is placed upon research, marketing and media planning for more effective communication with the target audience. Flexibility allows the student to work on assignments related to the elective.

MEDI315 Media and Techniques IV
This course exposes the student to the role of the art director and the possibilities of photography, film, TV and video. It continues to emphasize the role of research, marketing and media planning. The student in both electives will use the facilities to improve the material for the portfolio.

MENU401 Italian Menu Development
This course exposes the student to the variety and format of Italian menu design and engineering. A study of Italian food products and standards will precede a description of unique purchasing methods. Menu planning, costings and marketing will be included as part of the introductory part of the program. During the latter portion of the program, students will be expected to demonstrate techniques and menu knowledge in a featured dining experience.

MENU402 Menu Planning II
This course will provide the student with an increased understanding of how to apply the principles of menu planning in the health care sector and how to recognize the various factors influencing menu acceptability.

MENU577 Menu Planning
Traditional and modern Chinese menus are discussed and prepared with regard to patterns, combination of items, presentation and introduction to costing.

MET101 Materials Technology
This course will cover a range of materials that reflect the current state of the art in the Orthotics and Prosthetics profession. It will consist of instruction and demonstration with the broad areas of metals, plastics, textiles, adhesives, etc., and their properties, uses, and identification.

MILL502 Workshop Practice
The student will practice the use of various types of tools and equipment in effecting simple repairs of sewing machines. The proper use of gauges, micrometers and measuring instruments as well as basic tools will be practised. The student will learn safety practices, machine shop organization, maintenance procedures, scheduling and simple welding.

MIX103 Mixalogy
In this course, the student learns how to set up and run a bar, and how to make basic cocktails. Prerequisite: Sanitation and Safety

MIX576 Mixalogy
In this course, the student learns basic skills in cocktail preparation and bar operation. Prerequisite: SANI576.

MIX586 Advanced Mixalogy
In this course, the student develops speed and dexterity in bartending and foodservice in order to achieve professional standards. Prerequisite: MIX576.

MP201 Financial Management Projects
In this course, students work in groups to create an actual restaurant plan and prove its viability. They must apply the theory they have learned and make it work in the equivalent of an "in the real world" situation. The course culminates in a public presentation by each group to peers, instructors and industry personnel. Prerequisites: ACC207.

MSN410 Medical Surgical Nursing - Practical
This course provides a practical appartunity to apply knowledge, skill and attitudes related to medical-surgical nursing problems.

MT501 Meat Theory
In this course, the student gains a theoretical understanding of meats. Through a study of meat structure (which includes seafood, fish and poultry) the student will be able to identify appropriate methods of handling, preparing and cooking various cuts of meat.

MT501A
See MT501

MT544 Business Procedure
This course prepares the student to run a meat-cutting business, and includes how to service customers, merchandise the product and control costs.

MT544A
See MT544

MT701
See MT501

NC515 Computer Assisted Manufacturing
Students get practice and theory through the completion of theory modules, assigned projects and the programming and operation of a variety of C.N.C. machine tools. Computer numerical control programming techniques are developed in a series of controlled steps moving from basic two dimensional C.N.C. programming and machine operation to three dimensional computer assisted part programming and operation of multi-axis machining centres.

NC516 Tool/Fixture Design
This course introduces the students to the importance of fixture/tooling design in relation to computer numerical control manufacturing. The student will look at fixture design, clamping methodology and pelletization techniques.

NC517 Machine Parts Process Planning/ Quality Assurance
This course introduces the student to the methods of processing a manufactured C.N.C. machined part from start to finish. It also introduces the student to statistical methods of quality assurance, required to meet the manufacturing specifications of a machine part drawings and customer requirements.

NU111 Nursing Theory
This course will discuss a theoretical nursing framework with emphasis on assessment of the individual's ability to meet universal and developmental self-care requisites. The second part of this course will present the basic foundations, beliefs, and values of nursing. Attention will be given to the development of a professional identity with emphasis on responsibility and accountability. Legal implications for nursing will be presented.

NU112 Nursing Practicum
This course will provide specific opportunities for students to apply Orem's Self-Care Deficit Theory to individuals in the community, hospital and in simulated situations in the Nursing Resource Centre.

NU113 Human Relations
This course will discuss methods of developing effective interpersonal skills. Communication specific to health care delivery will also be explored.

NU121 Nursing Theory
This course will discuss a theoretical nursing framework with emphasis on assessment of the individual's ability to meet his/her health deviation self-care requisites in relation to common health deviations. Methods of prescribing nursing assistance will be presented. This course will continue to explore information about nursing and the law and professional responsibility as a member of the health team. Current trends in nursing practice will be addressed.

NU122 Nursing Practice
This course will provide selected opportunities for the student to apply a theoretical nursing framework to individuals with simple common health deviations.

NU131 Theory of Nursing Practice
This course will focus on the assessment, planning and implementation aspects of the nursing process with reference to Orem's Self-Care Deficit Theory in the promotion of health. Nursing interventions related to common body responses, manifestations and common health problems will be discussed and applied to case studies. Aspects of professional organizations and legislation will be presented.

NU132 Nursing Practicum II
The students will have an opportunity to apply the nursing process with reference to Orem's Self-Care Deficit Theory to the care of selected clients/patients in hospital and continuing care settings. The focus of this course will be assessment, planning and implementation and evaluation of nursing care.

NU133 Nursing Practicum III
The student will apply all aspects of the nursing process with reference to Orem's Self-Care Deficit Theory to the care of individuals/groups in acute care settings and the community. The student works toward functioning independently within the nursing assistant role as an active member of the health team in a preceptorship module.

NU231 Nursing Theory III
This course will discuss a theoretical nursing framework with emphasis on assessment of the individual's ability to meet his/her health deviation self-care requisites related to specific diagnostic and therapeutic interventions. Methods of prescribing nursing assistance will also be presented. This course will explore Nursing Ethics as it relates to the practicum. Emphasis will be on the role of the nurse as a patient advocate. Discussion of current trends will continue.

NU232 Nursing Practice
This course will provide selected opportunities for the student to apply a theoretical nursing framework to individuals with common health deviations who require specific diagnostic and therapeutic interventions.

NU241 Nursing Theory
Learn theoretical nursing framework with emphasis on the assessment of the individual's health concerns, health deviations, methods of prescribing nursing assistance, implications for nurses arising from current legislation, the role regarding membership in professional nursing organizations, e.g., C.O.N., R.N.A.O., O.N.A., current trends in health care.

NU242 Nursing Practice
This course will provide opportunities for the student to apply Orem's Self-Care Deficit Theory to individuals with complex common mental health deviations who require specific diagnostic and therapeutic interventions.

NU351 Nursing Theory V
This course will discuss a theoretical nursing framework with emphasis on the assessment of the individual's ability to meet self-care requisites, methods of prescribing nursing assistance, implications for nurses regarding the legislation, current and future trends in health care.

NU352 Nursing Practice
Apply a theoretical nursing framework to individuals who require specific therapeutic interventions and whose health is at the range of moderately to severely ill.

NU361 Nursing Theory VI
This course focuses on the integrative phase of nursing. Emphasis will be on developing leadership skills, and interdependence, as an active member at the health team.

NU362 Nursing Practicum VI
This course will provide opportunities for the student to apply a theoretical nursing framework to individuals on all levels of the health illness continuum. Emphasis will be an consolidation of all previous learning experiences.

NURS107 Nursing Theory
In this course, an introduction is given to the role and behavioural modes acceptable in nursing. Emphasis is on optimal health and its relations to the health continuum and the concept of self-care. Components of nursing processes are studied as the method of nursing.

NURS108 Nursing Practice
In this course, nursing skills are taught and co-related with nursing theory. Planning and supervised learning experiences for skills development are provided in the nursing laboratory, continuing care setting and community agencies.

NURS220 Nursing Theory - Level II
In this course, common nursing problems are studied along with the effects of prolonged bed rest and institutionalization. The concepts of rehabilitation and reality orientation and validation therapy are presented.

NURS221 Nursing Practice
In this course, the student begins to utilize the nursing process in caring for one to two clients. The focus is on nursing interventions to assist clients to meet their basic needs.

NURS230 Nursing Theory - Level III
In this course, the study of common nursing problems is continued, in terms of meeting client's needs, the effects of hospitalization, ethical behaviours and application of nursing principles.

NURS231 Nursing Practice - Level III
In this course, as the client assignment increases to two to three individuals, students are provided opportunities to strengthen their nursing process skills in more complex nursing situations.

NURS240 Nursing Theory - Level IV
In this course, the scope of the nursing assistant role is emphasized in studying comprehensive nursing care for a broad group of health problems.

NURS241 Nursing Practice - Level IV
In this course, the student works toward functioning independently within the nursing assistant role. The goal is to provide a comprehensive standard of nursing care. Client assignment is increased to three to four individuals.

NUT101 Basic Nutrition
This course introduces the student to the theoretical and scientific basis of nutrition. The course will examine the basic principles of the metabolism of carbohydrates, fat, protein, vitamins and minerals will be presented.

NUT102 Nutrition
In this course, the hospitality student learns to plan menus which take into account normal nutritional requirements and, in addition, alternate approaches such as, vegetarian, low-fat and high fibre diets. The course covers nutritional needs over the human life cycle.

NUT104 Nutrition far Fitness
This course details the metabolism of carbohydrates, lipids, proteins, vitamin, and minerals in the body. The course covers the role of nutrition for maintenance of overall good physical health. Prerequisites: ????

NUT202 Nutrition
This course details basic nutrition, the role of carbohydrates in the prevention of dental caries, and oral clinical signs from vitamin and mineral deficiencies. This course prepares the dental hygiene student for personalized dietary counselling of clients in a clinical setting.

NUT203 Nutrition Counselling far the Dental Hygienist
This course combines the role of nutrition in preventive dentistry with applied nutritional counselling experiences in a clinical setting. Students also learn about nutritional customs for different ethnic cultures.

NUT206 Nutrition Guidance
This course introduces the student to the Canada Food Guide. Students learn various diet analysis techniques. The student uses nutrition counselling to assess each of their Employee Fitness staff member's nutritional status and provide guidelines for improving their overall physical health.

NUT207 Nutrition Guidance (Special Cases)
This course details certain diseases and disorders such as hyperlipoproteinemia, diabetes, hypoglycemia, hypertension, gastrointestinal, obesity and coronvascular. The course covers the diet therapy used in these disorders.

NUT404 Advanced Nutrition
This course provides the student with an advanced knowledge and understanding of the science of normal human nutrition.

NUT501 Basic Nutrition
The student learns about nutrients essential to the well-being of the healthy human body; the food sources of these nutrients; their function in the body and any deficiency diseases, where applicable. The student will learn the use of food standards, that is, Canada's Food Guide and Canada's Guidelines for Healthy Eating.

NUT501A
See NUT501

NUT513
See NUT501

NUT731
See NUT501

OBC100 Ontario Building Code, Architectural, I
This course provides an introduction to the Ontario Building Code Act and Regulations. Requirements related to small (Part 9) buildings are explored in detail, and their impact on building design and construction document preparation examined.

OP206 Legal Office Procedures I
This course introduces the student to the basic procedures of a law office. The student learns to prepare legal communications and documents. Emphasis is placed on developing work habits needed to become a competent legal secretary.

OP207 Legal Office Procedures II
This course introduces the student to the basic procedures involved in the area of civil litigation, family law contracts, and divorce actions and enables the student to prepare the necessary legal documents.

OP208 Office Procedures
This course prepares the student for an office career through a current and comprehensive introduction to office procedures. This will include topics on "technical" office skills and material on broad transferable skills that can be used in any job.

OP217 Legal Office Procedures III
This course introduces the student to the basic procedures involved in the areas of corporate, real estate, and estate law and enables the student to prepare the necessary legal communications and documents.

ORN400 Operating Room Nursing - Theory/Labs
This course provides a study of the principles and practices of aseptic technique and surgical techniques essential for the nurse to function as a member of a surgical team.

ORN400
In this course, the student prepares an extensive paper on a surgical procedure and care of the client during the perioperative period.

ORN401 Operating Room Nursing - Practical
This course provides clinical application of the aseptic and surgical techniques learned in operating room nursing.

ORTH103 Orthodantics and Paedodantics far the Dental Hygienist
This course familiarizes the hygiene student with all aspects of current orthodontic theory and practice. The course is designed to integrate the basics of growth and development with the clinical aspects of orthodontic practice. The course will be taught through a series of lectures, laboratory work and clinical demonstrations and exercises.

ORTH104 Orthodantics
This course is designed to introduce the student of Dental Technology to the basic techniques required to fabricate removable and fixed orthodontic appliances.

ORTH106 Orthodantics
This course is designed to introduce the student in the techniques required to fabricate removable and fixed orthodontic appliances at an intermediate level.

ORTH114 Orthatics I
This course will provide the student with skills and information necessary for them to complete the following objectives: discuss footwear terminology, methods of footwear manufacture, and demonstrate the ability to cut, shape and bevel padding materials.

ORTH206 Orthodantics
This course is designed to introduce the student of Dental Technology to the basic techniques required to fabricate removable and fixed orthodontic appliances.

ORTH215 Orthatics II
This 105-hour full year practical course is offered in semesters III and IV of the chiropody program. It is a continuation of Orthatics I and will involve practice sessions and patient management.

ORTH305 Orthatics III
This practical course will involve both practice sessions and patient management.

PACKS.1 Package Design
The student will explare aspects of the package design field from concept to mechanical art and their applications to various printing methods.

PAT102 Design and Cutting Ruam Technalagy
Examine basic patternmaking techniques, identify the various pattern forms and shapes found in the production area, examine different computer applications to design and patternmaking by looking at the Gerber Creative Designer and the Gerber AccuMark 300 Systems.

PAT138 Pattern Drafting and Design
The principles of converting details from an illustration into an actual pattern suitable for use in construction of a similar garment, understand and begin to practise style and garment analysis in preparation for garment construction, acquire elementary skills in pants pattern construction.

PAT141 Apparel Pattern Drafting I
Learn the most basic elements af relating a two-dimensional pattern plan to a three-dimensional form through the exposition of flat pattern drafting skirt lessons, the role af comparative measurement and the relationship of 2D to 3D geometric shapes, basic shape formation through darts, tucks, gathers and seaming, the language of symbols used to communicate cutting instructions internationally.

PAT145 Pattern Grading I
Learn to apply grading rules, thearies and principles to basic women's apporel, the basic knowledge af all grade rules that are used to increase and decrease all basic blacks used in first year pattern drafting using the manual grading machine.

PAT151 Apparel Pattern Drafting II
Learn the basic principles of the previous course through intermediate flat pattern making blouse lessons, the more complex geometrical form of the human torso, the principles of compound 3D shaping demonstrated through dart movement and manipulations, intermediate level collar forms and cylindrical sleeve modelling.

PAT152 Swimwear/Activewear
Learn to develop a pattern designed to co-ordinate with the slack design, be aware of the fit of the garment, the skill to adjust the pattern, saleability of design and fabric choice, the cost of the garment.

PAT201 Pattern Drafting III - Day Dress
This intermediate pattern drafting course lays the foundation for all advanced level patternmaking by its focus on the shaping principles of day dresses. Raglan and kimono sleeves are included. Prerequisite: PAT151. Co-requisite: PAT202.

PAT202 Pattern Drafting III - Evening Dress
This advanced pattern drafting course emphasizes detailed fitting of the female form. Advanced patterns manipulations are demonstrated as well as specialty necklines for evening wear. Prerequisite: PAT151. Co-requisite: PAT201.

PAT261 Pattern Drafting IV - Jackets/Suits
This course on pattern drafting for tailored suits introduces the three-level design of tailored-interfaced-lined garments through jacket design. Advanced sleeves and shawl collars are also covered. Prerequisite: PAT201. Co-requisite: PAT262.

PAT262 Pattern Drafting IV - Coats
This course demonstrates the advanced architectural principles of patternmaking to coats by building a form related to, but different from, the human body. Speciality sleeves and collars are included. Prerequisites: PAT201 and PAT202. Co-requisite: PAT261.

PAT282 Pattern Grading
This course concentrates on French lining, jacket and coat block patterns using hand grading machines. The student will study pattern preparation and the logical work flow of computer grading.

PAT542 Grading I
The student will learn to apply grading rules, theory and principles to basic women's apparel. The student will acquire the basic knowledge of all grade rules used to increase and decrease any basic block from size 6 to size 16 using the manual grading machine.

PAT543A Drafting I
The student will learn the basic elements of flat pattern making and the proper language, symbols and cutting instructions used in the industry. The student will be able to draft patterns both from original designs and from photographs by applying industrial flat pattern making techniques.

PAT543B
See PAT543A

PAT545 Drafting II
This course will provide the student with more technical skills in flat pattern making. The student will continue to develop skills to solve intermediate level pattern making problems. All completed patterns are made in muslin and corrected for proper fit on a commercial size 10 dress form. Prerequisite: PAT543.

PAT546 Drafting III
The student will learn to interpret, draft and correctly fit muslins of more advanced designs for ladies' daywear apparel. Emphasis is placed on the fit of the garment, fabric suitability and current trends. Prerequisites: PAT543 and PAT545.

PAT556A Grading II
The student will learn to grade stylized garments using the same principles as those in PAT542. The student will have an awareness of how pattern parts must match after grading.

PATH109 Pathalagy
Pathology provides students with a general introduction to the concept of disease and how it alters physiological functioning. Topics include general body responses to injury as well as selected disease entities which have particular implicatons for fitness assessment and exercise prescription. Special emphasis is placed on medications and their possible effects on vital signs and exercise copacity.

PATH110 Pathophysiology I
This course is designed to provide the Dental student with an introduction to the study of disease. A classification of disease etiology is presented. General cellular and compensatory changes to pathology are examined, including body defences. Common body manifestations, as well as frequently used treatment modalities, are also examined. The concepts introduced in this course provide the foundation necessary to comprehend both systemic and oral disease. It is presented in a lecture/discussion format.

PATH111 Pathophysiology II
This course is designed to provide the dental student with a comprehensive understanding of common disease processes of the major body systems. The oral manifestations of each systemic disease, as well as the oral complications of treatment modalities are highlighted. The knowledge gained from this course will assist the student in his/her clinical practice by allowing him/her to assess clients in a systematic, holistic manner.

PATH111 Medicine General
This course is in the lecture and learning module format and provides, to the ancillary worker, the fundamental knowledge regarding systemic diseases and their possible consequences to clinical treatment.

PATH112 Oral Pathalogy
This course provides an overview of the etiology, clinical features, management and significance of the major pathological processes effecting the oral cavity, with the exception of pulpitis and periodontal disease. The significant oral manifestations of systemic diseases are also covered.

PATH115 Oral Pathalogy
Gain a basic understanding of oral pathology including the etiology and clinical consequences of the major dental diseases through extensive use of visual aids, primarily slides and handouts, measures which can be employed to prevent or control dental diseases , methods of early detection.

PATH117 Pathalogy and Therapeutics
Body responses and manifestations related to common health deviations are discussed as well as the therapeutic interventions.

PATH121 Pathology and Theropeutics
Learn simple body responses and manifestations to simple common health deviations and an introduction to pharmacology.

PATH208 General Pathalogy
Learn to define terminology related to the study of disease, identify the causes of disease, describe the various types of therapeutic interventions and identify the causes of fluid and electrolyte imbalances.

PATH209 Pathalogy
This course is a review of medical conditions effecting the various body systems with a detailed study of conditions and their treatment.

PATH232 Pathology and Therapeutics
This course will discuss complex body responses to common health deviations and selected simple, common health deviations as they affect normal functioning. Diagnostic and therapeutic interventions will be explored.

PATH243 Pathology and Therapeutics
This course will discuss specific health deviations related to maternal-newborn and mental health

PATH354 Pathology and Therapeutics
This course will discuss common advanced health deviations. Diagnostic and therapeutic interventions will be explored.

PC530 Product Costing
In this course, the hospitality student is required to calculate yields per batch and total ingredient costs for specific formulae and to calculate wages productivity for various baked products.

PCT101 Pre-Clinical Techniques
Through lectures, demonstrations and audio/visual resources, the student will become knowledgeable in the theory of the clinical functions of a dental assistant.

PCT102 Clinical Techniques
Through demonstrations and practical experience, the students will become knowledgeable in the clinical functions to be assumed in professional life.

PCT103 Clinical Techniques - Theory
Through lectures, demonstrations and audio/visual resources, the student will become familiar with the clinical function to be performed in general and specialty practices.

PCT104 Clinical Techniques - Practical
During the clinical sessions, the student will assist dentists and other auxiliaries in the George Brown College and Faculty of Dentistry clinics, performing a wide range of clinical assisting techniques.

PCT201 Pre-Clinical Techniques
Students are taught all of the principles and procedures involved in the practice of Dental Hygiene.

PCT201 Dental Hygiene Process I
Dental Hygiene Process is the major course for the Dental Hygiene students and is a prerequisite for Dental Hygiene Process II in Semester II. This course is composed of a didactic and practical component of which both support the four components integral to Dental Hygiene Care: Preparation and Assessment, Planning, Implementation, and Evaluation.

PCT203 Dental Hygiene Process II
This course focuses on the implementation of the theoretical components mastered in Dental Hygiene Process I. Through the provision of care to a wide sector of clients, with a variety of needs, each student applies the model of the Dental Hygiene Process.

PCT203 Clinical Techniques
The students will provide treatment services to a variety of patients. They are assigned to supervised clinical sessions at George Brown College.

PCT401 Pre-Clinical Restorative Tech
This course reviews tooth morphology, cavity preparation and cavity classification. Restorative dental techniques are taught using simulated restorative techniques on manikins.

PCT402 Clinical Techniques Practical
This clinical course offers the Restorative Dental Hygiene student clinical experience utilizing restorative dental techniques by providing care to a variety of clients. Collaborative supervision is provided by dentists and Restorative Dental Hygienists. Prerequisites: DENT404, DENT405, DENT401.

PCT403 Clinical Techniques Theory
This course offers an overview of currently available dental restorative materials and techniques. Prerequisites: DENT401, DENT404.

PD100 Introduction to Business Logistics
Business Logistics consists of the complex activities involved in moving goods from the source to the consumer. This course is an introduction to the various components such as materials handling, purchasing, warehousing, transportation and inventory control that constitute a full distribution system, and the role logistics plays in today's modern business.

PD103 Warehousing Management
This course provides an overview of the responsibilities, functions, techniques and tools of modern warehousing. Prerequisite: PD100.

PD105 Inventory Control
This course covers inventory goals and current control techniques such as usage forecasting (cost control), balanced inventories, proper lot-size choices, classification, records, physical control and inventory budgeting. Prerequisites: PD103 and 214.

PD202 Distribution Management Systems I
This is a fully integrated course dealing with the sub-systems of physical distribution such as the distribution manager's role including organization, concepts, strategies, skills required and the necessary interfacing with the company in order to react instantly to shifts in supply, demand and total cost. Prerequisites: PD103 and 214.

PD203 Traffic and Transportation Management I
This course provides an overview of the transportation role in Canada and its impact on the domestic and international scene. Specific areas covered are: selection of modes; types of service; product characteristics; documentation; insurance; shipping rates; federal and provincial government regulations; management operations; information systems and economic impact on markets.

PD204 Industrial Purchasing
This course examines the role of purchasing in the modern business organization, including basic purchasing techniques such as supply sources, pricing, negotiation with suppliers, quality control, timing, cost analysis and control, make or buy decisions, planning basic policies and organization. Prerequisite: PD100.

PD205 Distribution Management Systems II
This course is designed to examine issues that are important to today's distribution executive. Such aspects as budgeting, allocation of resources, return on investments, quantitative techniques, strategic planning, future direction, leadership qualities and personal targets are some of the topics covered. Prerequisite: PD202.

PD206 Inventory Control II
This is an advanced course which emphasizes modern production and inventory control systems in areas such as sales and forecasting information, product and processing information, costing, capacity planning and scheduling, purchasing, inventory management and control, material requirements planning, economic lot-sizes and inventory models. Prerequisite: PD105.

PD207 Traffic and Transportation Management II
This is a continuation of the level I course. It covers extensively highway transport and ocean shipping components, management control functions, consolidation, materials handling and bulk shipping concepts, packaging, financial aspects of carrier operation and trade (export and import) methods for international distribution. Prerequisite: PD203.

PD208 Import/Export Documentation
The purpose of this course is to introduce the student to basic export and import systems that are applicable to Canada. It covers such topics as terminology, customs procedures, export and import rules, documentation and tariff interpretation, etc.

PD209 International Trade
This course is about the way organizations became and remain international in scope. It is about the experiences of organizations of all sizes as they come to grips with an increasingly competitive global environment and the practices of management when a local market perspective is no longer enough. Prerequisites: PD202, 203 and 105.

PEDN403 Pediatric Nursing - Practical
This course provides a practical opportunity to apply knowledge, skills and attitudes learned in PEDN404 in the nursing care of children.

PEDN404 Pediatric Nursing - Theory
The focus of this course is the theoretical basis of nursing care of sick children and is taken concurrently with PEDN403.

PER1100 Periodontics I for the Dental Hygienist
This lecture and practical course considers the structure and functions of the periodontal tissues, the disease processes and predisposing factors which affect these tissues and the various approaches to disease control. Each periodontal disease is discussed on the basis of ten key factors.

PER1101 Periadontics II for the Dental Hygienist
A lecture and practical course that builds on Periodontics I for the Dental Hygienist. This course considers the structure and function of the periodontal tissues, the disease process and predisposing factors which affect these tissues and the various approaches to disease control. Each periodontal disease is discussed on the basis of ten key factors. The format of this course includes lectures, case presentations, viewing and assessing of periodontal slides. Prerequisites: PER1100, PCT201

PERS202 Introductory Human Resource Management
In this course, the student is introduced to basic human resource management strategies common to the hospitality industry. Because people are the most essential resource of a hospitality operation, successful strategies for hiring, motivating, training and communication are therefore of utmost importance.

PERS502 Introductory Human Resource Management
See PERS202

PHAR102 Phormocology and Emergency Care
This course is designed to provide the Dental Assisting student with a basic understanding of the general principles of pharmacology, as well as common medical emergencies which may occur within a dental practice. Specific drug groups which are used in dentistry, as well as those which may complicate dental care, are presented. Prerequisites: BIO115, BIO104.

PHAR205 Pharmacology
This course is designed to introduce the student to the use of drugs as therapeutic agents. The student will learn to recognize the medical usage of various agents and any chiropodial implication.

PHY100 Applied Physics
This course includes the following: accuracy error; properties of matter, fluid statics, pressure on retaining walls, footings and anchor blocks, fluid flow, thermal expansion, calorimetry, heat transfer, optics, illumination, wave motion, theory of sound and acoustics.

PHY106 Applied Physics
This course covers: linear motion; Newton's laws of motion; force; properties of matter; work, energy and power; heat, temperature and thermal expansion; change of state; heat transfer; humidity; curvilinear motion; linear impulse and momentum; angular momentum; energy of rotating bodies; fluid statics and flow; continuity equation; Bernoulli's equation; flow construction and head meters; frictional losses in pipes and fittings; and reflection and refraction of light and illumination.

PHY108A Physics

PHY116 Physics
This course covers linear motion, impulse and momentum, Newton's Laws, properties of matter, work, energy and power, curvilinear motion, angular momentum, fluid statics and flow, continuity equation, Bernoulli's Equations and flow construction.

PHY133 Applied Mechanics and Physics at the Piano
The physics studies in this course are directly related to the piano and music. It includes the study of levers and acoustics.

PHY200 Modern Physics
Newton's laws of motion, energy, conservation of energy, conservation of momentum and collisions will be reviewed. Electromagnetism includes: charge particle trajectories, electromagnetic waves, spectrum, speed of light, diffraction. X ray spectrum, photoelectric effect, Compton effect, wave particle dualism. Quantum theory, Bohr atom, energy levels, insulators, conductors, semiconductors are discussed.

PHY201 Physics
An introductory physics course for technologists. The course explores the nature of physical law and its application to areas of classical physics (mechanics, heat, light). A background in calculus is assumed.

PHY202 Modern Physics
An intermediate physics course for technologists. The course examines three of the major areas of 20th-century physics: special relativity, quantum mechanics, and nuclear physics. Exposure to an introductory physics course is assumed.

PHY231 Physics
This course continues with electrical theory and its applications to printing technology. In addition, there will be an introduction to light, optical instruments and the theory of illumination and colour.

PHY232 Physics
This course will continue electricol theory into basic AC circuits and introduce some topics in electronics and solid state physics which are relevant to the graphic arts industry. Some topics in electro-optics are also covered.

PHY234 Applied Physics
This course includes kinematics (linear motion) and kinetics (force and motion). Flow in open channels, Bernoulli's equation, siphons, and Archimedes principle are studied.

PHY245 Applied Physics
This course looks at properties of matter and fluid states, including elementary flow of fluids and open channel flow.

PHY301 Thermodynamics
This course includes basics on forces, pressure, work, energy and power, substances, open and closed systems, path, cycle, the laws of thermodynamics, enthalpy, entropy, laws of gases, Carnot cycle, Carnot engine, efficiency, inefficient of performance (refrig.), balance of energies, heat transfer, applications on all above topics.

PHY402
In this course, the student will gain knowledge and an understanding of the structure and functioning of the human body in relation to health, disease and nutritional status.

PHY513
This course expands the areas the student studied in SC530. It includes forces and vectors, equilibrium and friction, motion, work, single machines, and temperature and expansion.

PHY523
This course is the second in the series. It includes gas laws, electricity, and magnetism.

PHY531 Physics
This course covers the physics applying to heating and cooling and includes such topics as: properties of matter, fluid statics, fluid power and fluid flow; work energy and power; temperature, heat, specific heat, latent heat, sensible heat; and heat exchange, cooling, linear expansion and gas expansion.

PHY700 Physics for Pre-Health
This course is a review of basic physics and its application to health sciences. It covers the general properties of matter mechanics and other related topics.

PHY505 Muscle Physiology
This course details the anaerobic and aerobic energy systems, oxygen deficit and debt, inverse and inverse myotatic reflexes, the physiological changes that occur during strength and endurance training, and the acute and chronic effects of fluid loss during exercise.

PHY507 Physiology
This course covers the development, structure and function of bones, the nervous system, muscle and tissues under normal and pathological conditions as they may be seen in regards to prosthetics and orthotics.

PHY508 Exercise Physiology
This course focuses on the cardiovascular and respiratory systems. Students are introduced to the normal physiological responses at rest, and during exercise in the apparently healthy, fit and unfit, older, and high risk individual. Long term adaptations following exercise will be studied as well as the effect of different environments on performance.

PHYS208 Physics
This course includes the topics of properties of sound and sound measurement, acoustics, simple harmonic motion, vibration and damping, magnetic fields and forces, Faraday's Law, induction, A.C. and D.C. machines, and electromagnetic forces.

PIAN100 Tuning
The student is introduced to basic tuning techniques. The emphasis is on learning to hear beats, tuning octaves, unisons and temperament.

PIAN103 Upright Rebuilding
The student is introduced to the upright piano action, learning the principles of how the action works, parts replacement, how to repair and how to regulate it.

PIAN104
See PIAN103

PIAN200 Tuning
This course continues to develop the skills learned in PIAN100. Pitch raising and voicing are discussed and practised on the pianos being rebuilt.

PIAN201 Action Regulation
This course is similar to PIAN101 with the focus on grand piano action.

POD127 Podalogy I
This course is designed to develop the students knowledge of soft tissue lesions affecting the foot. Topics include: etiology and pathology of simple epidermal and nail conditions, and keratinization.

POD227 Podalogy II
This Podology course in semester III places an emphasis on structural determities affecting the feet. The course is viewed as an extension of the Podology I course.

POD237 Podalogy III
This course places o continued emphasis on structural deformities affecting the feet. The course is viewed as an extension of the podology II course.

POD307 Podology IV
The 45 hour Podology course emphasizes the management of patients whose foot conditions are complicated by systemic disorders, and poediatrics.

PRAC111 Management Practice (Work Experience)
The student acquires on-site work experience with on approved property management company.

PRAC213 Mortgage Administration
This course provides the student with an overview of the preparation of mortgage schedules and systems of control over cash flows. Prerequisite: ACC203.

PRAC211
See PRAC111

PRAC217
This introductory course acquoints students with the use of computer systems to satisfy business information needs. Programming is introduced, with emphasis on problem solving and structured program design. Computer-based activities include use of DOS to manage files and use of database software to develop programs for business applications, in particular those pertaining to property management.

PRGM211 Computer I
This course is an introduction to the use of computers in the fields of advertising and graphic design. Emphasis is placed on the application of basic skills to computer technology. Through a hands-on approach, the potential of the Macintosh computer as a design and production tool is explored. Desktop publishing is introduced.

PRGM230 Computers
This course covers fundamentals of operating microcomputers and basic programming techniques. Input and output, decisions and branching, looping, built-in functions, arrays, program design, screen graphics, sub-routine, random numbers, and peripheral devices are included.

PRGM240 Computer Programming/Systems
This course is designed to provide a working knowledge of C programming language, to develop an understanding of user programs, and to develop the ability to create and modify user programs. The student assignments will be project-oriented. The following topics are covered: introduction to UNIX and C, data types and operators, control statements, branching and looping.

PRGM305 Computer II
The use of the computer as a drawing and design tool, electronic page composition, production of camera ready art for printing, use computer software current in the advertising and graphic design fields, layout, type placement and type modification, creation of newsletters, ads, promotional literature reports and other graphic materials.

PRGM315 Computer III
Learn to expand the use of the computer as a drawing and design tool, electronic page composition, a variety of software programs, flexible illustrator programs as used in business, problems peculiar to the graphic design and advertising professions.

PRGM528 Computer Literacy
Learn the specific uses of the microcomputer, required skills for many of today's jobs, an overview of computers and their use in various businesses, software applications. For the beginner and novice users.

PRO201 Promote Your Business
Gain a basic understanding of the principles of advertising and promotion as applied to small businesses, ad research, planning, media selection, ad creation skills, and evaluation of advertising results, direct marketing principles.

PROD102 Introduction to Printing Plant Processes
An introduction to printing plant processes, office structure and personnel, and involves concepts related to plant layouts, production co-ordination/scheduling and estimating functions, including the estimation of a simple job.

PROD200 Production Scheduling
This course introduces the student to operations management. The student is introduced to the process of data collection and information analysis through decision making, forecasting, aggregate planning and inventory control. This information is necessary to generate business strategies.

PROD202 Production II
The proper use of the technical tools of graphic designers, mechanical assembly, presentation, printing specifications and type mark-up, graphic reproduction methods such as one and two colour printing, duotone, screen printing, offset and litho printing.

PROD212 Production III
This course continues to stress mechanical assembly, presentation, accuracy in line treatment, printing specifications and type mark-up. The student is introduced to more sophisticated and specialized forms of printing such as four colour process engraving and hot stamping. Production skills for studio use (e.g., working with the printer, colour separators, deliveries, clients, etc.) are emphasized.

PROD315 Praduction V
This course provides the student with advanced training in camera-ready art, colour separation, film and studio management. The student learns to interpret client and marketing directives and is introduced to basic psychology for effective client presentation. Personal motivation and creative talent management and development are explored.

PROJ100 Introduction to Management I
This course prepares the student to understand the nature of working in the fitness industry. Basic planning skills and an overview of Fitness Centre operations are included. Time is allotted for on-site visitations to selected facilities.

PROJ200 Research Plan
This course will provide the student with the skills and knowledge in the preparation of a business plan for either a shopping plaza, office building, condominium or rental property for his or her major program project.

PROJ205 Clinical Training in Fitness Field
The students are involved in demonstrating competencies in fitness programming, fitness testing and club administration and nutritional guidance and leading exercise classes in the work setting. Close communications and visitations are employed by staff to maintain ongoing feedback/evaluation between the agency, the student and the staff. Prerequisite: Successful completion of Semester I, II and III.

PROM501 Pramotional Design I
Projects involve preliminary thumbnail sketches, full size roughs and comprehensives. Emphasis will be placed on development of good layout arrangements, sketching skills and their comparisons as well as good presentable marker renderings of comprehensives for magazine and newspaper advertising.

PROM511 Pramotional Design II
The student will develop each project through to the finished art stage, ready for camera. The emphasis will be placed on development of line drawing techniques and working drawings as applied to layouts of advertisements of diversified products.

PROP211 Amenity and Camman Area Management
This course provides the student with management practice skills and cost control knowledge in common areas inside and outside of buildings.

PROP213 Office Building Management
This course provides a fundamental knowledge of office building management including tenant mix, lease negotiation, common area management, advertising and promotion, taxation, insurance and legal considerations.

PROP214 Shapping Centre Management
This course provides a fundamental knowledge of shopping centre management including areas of tenant mix, lease negotiations, advertising and promotion, insurance, risk management and taxation.

PROP216 Candaminium Management
This course provides the student with the differences between the management of rental and condominium accommodation and a knowledge of condominium by-laws, declorations, director functions and the condominium act.

PROS102 Materials and Labaratary Techniques
The student will have the opportunity to develop minimal technical skills necessary to enter the profession as a technician to fabricate Orthotic/Prosthetic devices to the specifications of a patient's measurement chart.

PROS103 Fabrication Theary
This course is designed to provide an understanding of the history, materials, componentry, alignment criteria and fabrication techniques necessary for making Orthotic/Prosthetic devices. Also the indications and contra-indications of patient use.

PROS112
See PROS102

PROS113
See PROS103

PROS203 Pre-Graduate Wark Experience
This pre-graduate work experience, occurring in the final semester will allow the student to work for a 5 week period at a Canadian Orthotics and/or Prosthetics facility of their choice.

PROS205 Materials and Labaratary Techniques
This course, closely coordinated with fabrication theary, allows the student to receive hands on instruction and experience in fabrication procedures to progress through a series of projects in order to apply theoretical knowledge gained in the academic areas of the Orthotic/Prosthetic program.

PROS206 Fabrication Theary
This course is closely coordinated with laboratory fabrication to help the student better understand the history and development of various orthotic and prosthetic devices. Topics include fabrication techniques and procedures, as well as camman materials usage.

PROS215
See PROS205

PSP100 Film Impasition/ Printing Surface Preparation
Learn about black and white, line colour and halftone stripping, job planning and layout of line and halftone negatives, imposition and the preparation of folded dummies and layout sheets for various types of bookwork, darkroom techniques for making contacts and duplicates and making presensitized offset plates, one and multi-colour line negative stripping, pagination concepts using PCs.

PSP105 Printing Surface Preparation I
This is a basic course for black and white, line colour and halftone stripping including job planning, composition, the preparation of folded dummies and layout sheets for various types of book work, darkroom techniques for making contacts, and making presensitized offset plates.

PSP107 Printing Surface Preparation II
The techniques of black and white, colour and four-colour process film stripping, including contacting, spreads and chokes, and a number of different pre-press colour proofing systems.

PSP200 Film Impasition/ Printing Surface Preparation
The techniques of black and white, colour and four colour process film stripping, including contacting, step and repeat, spreads and chokes and an introduction to the programming and operation of a photocomposing machine and a number of different pre-press colour proofing systems, the use of PCs to move, store and retrieve digital data for pagination.

PSP300 Film Impasition/Printing Surface Preparation-Calaur
This course emphasizes four colour process stripping procedures, including the preparation of flats containing chokes and spreads, fake colour and colour separation. Colour charts are prepared by the student, incorporating the various screen angles and tints. Further experience in manual step and repeat methods and machine photocamposing.

PSP335 Electronic Prepress and Image Assembly - Calour
Process colour assembly procedures using computers most accepted by the graphic arts Industry, spreads and chokes, fake colour and colour separations prepared electronically using QuarkXPress, Adobe Photoshop, Colour studio and other popular software, electronic pagination with emphasis to preparing for the desktop environment, pre-press equipment.

PSP536 Printing Surface Preparation
Basic block and white stripping techniques and line colour stripping and introduces job planning and layout of flats to contain line, halftone, line colour and duotone negatives.

PSP547 Film Impasition and Offset Platemaking
A basic course for black and white line colour stripping. The course introduces job planning and layout of flats containing line and halftone negatives. Proofing and platemaking procedures and contacting procedures will be included.

PSY106 Applied Human Relations
This elective will give students an increased understanding of themselves and others, with the goal of achieving greater career success through enhanced human relations skills. Topics include perception, motivation, personality theory, love in the workplace, persuasion, leadership and job satisfaction.

PSY107 Intraductory Psychalagy
This course introduces many of the major areas in contemporary psychology and is designed to give the student a basic understanding of the workings of the human mind. This should enable the student to deal more effectively with patients in clinical settings. The topics covered include psychology as a science, the nervous system, perception and sensation, memory, learning, cognitive processes, development, social interaction, and psychological disorders and their treatment.

PSY115 Life Span Development
This course covers the major psychological theories concerning human development across the life span. Emotional, cognitive, social and personality development are examined in a stage theory approach, from conception through late adulthood.

PSY116 Introduction to Gerantalagy
This course provides students with a general overview of the field of gerontology. Psychological and social issues which impact upon aged individuals are examined. Theoretical and practical approaches are utilized to provide a broader understanding of what it means to be an older adult in Canadian Society.

PSY118 Applied Psychalagy
This course provides students with a general overview of the field of gerontology. Psychological and social issues which impact upon aged individuals are examined. Theoretical and practical approaches are utilized to provide a broader understanding of what it means to be an older adult in Canadian Society.

PSY120 Introduction to Psychalagy
Through study of the five major schools of psychology students will gain understanding of human behaviour, cognition and affect.

PSY125 General Psychalagy
This course deals with the basic principles of the science of mind and behaviour. The student will be encouraged to explore the major theories of personality development, states of consciousness, stress and health, psychological disorders and therapies.

PSY126 Career Studies
This course is designed to help students focus more clearly upon their academic and career paths. It includes detailed self-assessment and career planning.

PSY161 Introduction to Psychalagy
This course introduces students to the diverse topics studied in psychology. Students will be exposed to the key theories and leading research in perception, memory and cognition, personality assessment, learning, emotion and motivation, stress and coping, psychopathology and therapy, brain and behaviour and research methodology.

PSY162 Interpersanal Psychalagy
The focus is upon self-exploration and personal awareness. The class incorporates lecture, discussion, demonstration, experiential exercises, and active participation, with the emphasis always upon learning what we feel, think and believe about ourselves and others, and the ways in which these thoughts, feelings and perceptions affect our relationships with others. Topics include self-concept, stress, assertiveness, love, sexuality, listening and resolving conflicts.

PSY169 Intraductory Psychalagy
Learn the basic tenets, schools of thought, and theories of psychology. In this course we will examine not only the things people do but why they do them. Using methods of science, learning, motivation, perception and cognition will be explained.

PSY170 Psychalagy for Chirapady Students
This course is an introduction to psychology with an emphasis on applications to the chiropody field, including patient/health care relationships. Lectures, small group work and seminars will be used.

PSY200 Psychalagy Project
An advanced project in psychology.

PSY204 Fashion Management-Socialagy/ Psychalagy
This course provides an introduction to psychology, sociology and ethics with an emphasis on issues related to the fashion field, including the portrayal of women in advertising. Lectures, small group work, role plays and presentations will be used.

PSY207 Creative Fashian-Psychalagy
This course gives an introduction to psychology with an emphasis on issues relating to fashion such as perception, advertising, personality and creativity. Lectures, small group work, role plays and presentations will be used.

PSY208 Organizational Behaviour I
This intraductory course in organizational psychology focuses on the individual by examining the topics of personality, attitude, learning, perception, social attribution and interpersonal communication. The foundation of knowledge about the individual is used to understand the dynamics within and between groups.

PSY215 Human Resources Management
In this course principles learned in human relations will be applied to the business world. Topics discussed include personality and work, the motivation to work, working in groups, social skills and work, working in organizations, work in different cultures and job satisfaction.

PSY218 Organizational Behaviour II
This advanced level course in organizational psychology examines the critical topics of power, culture, conflict, stress and change in organizations. The effect of these aspects of the workplace on both the individual and the organization are studied. Prerequisite: PSY208 or permission of the professor.

PSY302 General Psychalagy
This course deals with theories and issues in human relations. The student is encouraged to explore personal patterns of communication, behaviour and belief, and to experiment with possible alternatives. Topics are selected by class members and active involvement in classroom activities is important.

PSY404 Introduction to Psychalagy
This course will provide the student with a sound understanding of human behaviour at the level of the individual, group and organization with specific emphasis on seniors.

PSYN400
This is a self directed course that promotes the understanding of the resources and care of the psychiatric client in the community.

PSYN403 Psychiatric Nursing - Practical
The focus of this course is to provide a practical opportunity to apply knowledge, skill and attitudes learned in PSYN404 - Psychiatric Nursing - Theory, in the nursing care of the psychiatric patient.

PSYN404 Psychiatric Nursing - Theary
The focus of this course is on the application of the concepts of mental health and the principles and concepts of psychiatric nursing and is taken concurrently with PSYN403.

PUR102 Purchasing for Haspitality
This course prepares the student to purchase food, supplies and services for hospitality operations. It includes all the steps in the purchasing process, from selecting a supplier to controlling the received inventory.

PUR104 Kitchen Management
An introductory look at controls in a restaurant operation. The student learns to perform the required calculations.

PUR502 Purchasing
An introductory look at controls in a restaurant operation. The student learns to perform the required calculations.

PUR502A Purchasing
See PUR102

PUR505 Kitchen Management
See PUR104

PUR505A Kitchen Management
See PUR104

PUR530 Product Casting
In this course, the student is required to calculate yields per batch and total ingredients costs for specific formulae and to calculate wages productivity for various baked products.

PUR531 Ingredients and Material Purchasing
The student is required to determine the ingredients, equipment and materials needed to open a commercial bake shop which will sell a variety of baked items. The student will also provide prices of product and ingredient supplies information.

PUR578 Kitchen Management
In this course, students learn about the special equipment and unique setup of this equipment in a Chinese kitchen. They also learn to read and understand a kitchen layout drawing. They learn about purchasing, receiving, storage, inventory control procedures, staff timetabling, efficient use of human resources, and food and labour cost controls.

PUR705 Kitchen Management
See PUR104

PWE263 Practical Wark Experience
The student will make arrangements, or be assigned, to work in an environment applicable to courses taken. This segment of the program will be not less than eight weeks in length.

PWE500 Practical Wark Experience
Following completion of academic work, the student will be placed in an industrial environment with a specific firm for four weeks. Assignment to an apparel related organization will be based upon the student's needs, aptitudes, abilities and career aspirations. Progress of the student will be monitored by faculty and the management of the organization.

QC100 Quality Assurance
See AC100

QC212 Quality Assurance
In this course S.P.C. principles and procedures teaches the essentials of statistical techniques used to control process variation in an industrial setting. The course stimulates participants to think in terms of systems, processes, problem analysis, prevention and continuous improvement of process output. This course will be taught according to standards, ISO 9000 and other guidelines.

QC501 Quality Cantral
Quality Control procedures as pertaining to the printing industry and related fields and the various segments within each are emphasized.

RAD210 Radiagraphic Pattern Recagnition
This course is designed to provide the student with the ability to discuss with a dentist the radiographic implications directed towards the preprosthetic preparation of the tissue far full dentures and far the design of a removable partial denture.

RBN401 Review of Basics to Nursing
This course examines the health care system in Ontario, the privileges and responsibilities of a registered nurse, offers a review of physical, biological and social sciences as well as introduction to the problem-solving approach to nursing.

RCM231 Building Canstrucian and Drafting I
This course is an introduction to perspective drawing, sketching and residential insulating techniques, including some R200 methods, constant reference to Ontario Building Code and preparation of working drawings of a two-storey home.

RCM232 Building Canstrucian and Codes I
This more detailed study of house construction includes such topics as construction sequence, footings and foundation walls, conventional framing systems including floor, wall ceiling and rafter framing, framing drawings and roofing systems, with constant reference to Ontario Building Code.

RCM233 Project Management and Scheduling I
This course covers: project scheduling, production scheduling, corporate management structure; pre-construction; project start-up; during construction; project close-out; management of trades and suppliers; project administration; reporting systems; liaison with government agencies; and decision making and people skills.

RCM234 Small Business Management I
See SBM166

RCM235 Contracts and Specifications
This course looks at Canadian Standards Law, law of contracts, building regulations, introduction to specifications, master format, scope of work, contract law, contract documents, tendering process, tender documents, sub-contracts and scope of work.

RCM236 Quantity Surveying and Estimating
This course introduces quantities, Canadian Institute of Quantity Surveyors format, masterformat, blue print reading, substructures, residential applications. Introduction to electronic spreadsheet applied to quantity take-off extensions is included.

RCM237 Camputer Applications (Financial Management)
Pricing and costing, salary schedule, petty cash schedule, payroll deduction, depreciation of an asset, break even point and lease/buy option decision, and balance sheet are all covered.

RCM241 Building Canstrucian and Drafting II
This course looks at residential masonry techniques, truss framing systems, grading plans, septic systems, small house design and preparation of working drawings.

RCM242 Electrical Services
This course covers methods of generation and distribution of electricity: Ohm's law and power relationship; hydro codes; hydro inspection; terminology; types of wire; temporary services; residential wiring principles and applications; practical wiring in lab; study of high rise application, electric heating; and permits.

RCM243 Mechanical Services - Plumbing
This course looks at architectural drawings and their relationship to mechanical drawings; orthographic and isometric drawing; mechanical symbols; plumbing fixtures; code; shop drawings; sanitary drainage; venting; clean-outs; floor drains; hangers; water service; rural water system; hot water heating. Estimating is introduced.

RCM244 Mechanical Services - Heating
This is an introduction to heating and cooling load estimating, ducted air distribution systems, residential H.V.A.C. control systems, safety devices, settings and operation; major equipment, boilers, furnaces, cooling units, sizing practices, fuels, equipment location and safety requirements.

RCM245 Project Management and Scheduling II
This course is a continuation and application of principles learned in RCM233.

RCM246 Applied Mechanics - Timber Design
This course covers basic structural stresses including tension compression and shear; reaction, shear and moment calculations for uniformly distributed and concentrated loading conditions; design of timber beams, girders, decking, columns and lintels.

RCM247 Camputer Applications (Business Plan)
The student will prepare a business plan that includes operations, strategies and financial strategies.

RCM248 Quantity Surveying II
This course involves a detailed study of take offs with computer applications.

REF534 Electricity
This course concentrates on basic electrical fundamentals. The theory portion deals with electrical laws as they pertain to various electrical terms (i.e., voltage, amperage and resistance.). The practical portion of the course has the student build electrical systems from various wiring diagrams incorporated from the theory classes.

REF535 Refrigeration
In this course, the student is introduced to various refrigeration terms such as heat transfer, temperature, heat definitions, psychometrics, pressure, gas laws, the basic cooling cycle, the mechanical compression refrigeration cycle, and safety. For practical applications, the student will complete different piping projects.

REF536 Refrigeration
This course continues the development of skills required for the refrigeration and air conditioning trade. Topics covered are basic controls, compressors, condensers, evaporators, metering devices, refrigerants, piping principles and receivers. For practical work, the student will assemble a complete working refrigeration system.

REF537 Refrigeration
The student will be introduced to the following: simple defrost methods, problems regarding air and moisture in the system; compressor motors; compression ratio; compressor shaft seals; compressor lubrication; and evaporative condensers and cooling towers. In the lab, the student will add components to the unit completed in REF536 in order to make the system more complex.

REF538 Refrigeration and Air Canditianing
This course deals with the following topics: comfort cooling; unit operation; noise level; the year round AC unit; installation of commercial and residential units; and head pressure control and overload devices. Laboratory work will consist of a series of test operations on low temperature water cooled refrigeration systems.

REF539 Refrigeration and Air Canditianing
This course incorporates the following topics: commercial installations; capacity control; heat pumps; multiples systems; hermetic burnouts; secondary refrigerants; and control circuits. Lab work will consist of chillers, air conditioners, computer room cooling and heat pumps. For a period of two weeks the student will go out to industry with a contractor.

REH705
This course is divided into two 15-week seminars. The topics include basic grammar, spelling, vocabulary and writing. Short stories and poetry are also studied.

REL112/212 Residential Management
This course provides the student with an understanding of the legal frame work within which he or she will operate (Landlord and Tenant Act) and a basic knowledge of residential management of townhouses, low rise, high rise, private and public housing.

RETL201 **Retail I**
This course explores the design and rendering of layouts for newspaper ads, direct mail pieces and catalogues. It emphasizes the importance of clean, fast marker renderings. Using the skills learned in DES103 and TYPO102, attention is given to the integration of headlines, copy, prices and illustrations in the development of a cohesive design.

RETL305 **Retail II**
This course introduces a wide range of advertising areas, including real estate, fashion, direct response and automobile. The student develops their design ability by creating arresting visuals for a sophisticated market and combining them with headlines to achieve cohesive communications objectives. Portfolio material is developed in this course.

RETL315 **Retail III**
This course continues to apply innovative design and word solutions to a wide range of communications objectives for the retail market.

RETL501 **Retail Advertising I**
This course provides an extensive study in marker rendering of products for retail advertising. The student will learn to solve design problems through the use of thumbnail sketches, rough layouts, and various techniques involved in layout and design.

RETL511 **Retail Advertising II**
The student will take an in-depth look at retail advertising, including comprehensive study of layout, illustration, mechanical art, paste-up and colour separation by amberlith overlay. The components covered will be necessary to successfully produce portfolio pieces.

RM205 **Manuals Management**
This course introduces the student to the need for high quality manuals and a cohesive manuals program. The course demonstrates how to write clear, consistent material for manuals and teaches the student how to maintain an efficient manuals program.

ROTO200 **Machine Printing Ratogravure**
This basic course in the fundamentals of rotogravure printing covers safety and housekeeping, lubrication, roll feed and web tension, the printing units, services of press at air, water, gas, and electrical controls, oven drying, roll rewind, circulating pump for inking system, gravure inks and their compatible solvents, ink viscosity measurements, doctor blade finishing, position register, substrates, running problems and corrections.

ROTO300 **Machine Printing Ratogravure**
This is an advanced course in rotogravure printing with exercises in two and four colour printing, including colour mixing and theory of electronic register control.

RSCH251 **Research**
This segment of the program will be used by the faculty, at the discretion of the coordinator, to assist the student to develop a better understanding of subject matter in courses or areas in which the student is weak and where more time is required. If this is not required, the student will conduct research within an area of the opporel industry and provide a report.

RSCH500 **Research and Survey Courses Project**
See AUD500

RSCH510B **Research and Survey Courses Project**
See AUD500

SAFE105 **Workplace Health and Safety**
This course introduces the student to a comprehensive coverage of the field of occupational health and safety, focusing on relevant government legislation and the organization's efforts to prevent and control occupational injury and illness, property damage, security breaches, pollution and product liability.

SAN100 **Sanitation, Safety and Equipment**
This course is an introduction to basic sonitation/safety principles and practices in foodservice operations. The course is based on the National Sanitation Training Program.

SAN402 **Infection Control and Safety II**
Principles of sanitation and safety practices in relation to foodservices operations are discussed. Students learn how to implement and maintain high standards of foodservice sanitation and safety.

SAN500 **Sanitation, Safety and Equipment**
In this course the student learns of the potential dangers inherent in improper food handling. Proper procedures and the special attention for the prevention of food-borne illness required of food handlers are covered.

SAN500A
See SAN500

SAN501/511/531
See SAN100

SAN576 **Sanitation, Safety and Equipment**
This course is an introduction to basic sanitation/safety principles and practices in foodservice operations. The course is based on the National Sanitation Training Program.

SAN577 **Sanitation**
The first half of the Canadian Restaurant and Foodservices National Sanitation program is taught in this course. It includes subjects such as: personal hygiene, prevention of food-borne illness, workplace sanitation, and food holding and storage requirements.

SAN57B **Sanitation**
The second half of the Canadian Restaurant and Foodservices National Sanitation program is completed. Emphasis is on pest control, ware washing, foodservice facilities, and general maintenance.

SAN730
See SAN100

SBM100 **Denture Therapy**
This course deals with business topics of interest to denture therapists including setting up a small business, determining the appropriate sources of financing and the basics of maintaining appropriate financial records. The student will be able to address the typical issues that arise in running a business, such as dealing with a banker, establishing a location for a business, considering insurance options and evaluating financial performance.

SBM101 **Small Business Management**
This course provides students in the construction field with an understanding of business essentials. These include setting up a small business, selecting an appropriate legal form of business and preparing a detailed business plan. Students will learn about financing a new business and the basic financial statements that permit evaluation of a business's performance.

SBM101A **Small Business Management**
This course provides students in the construction field with an understanding of business, selecting an appropriate legal form of business and preparing a detailed business plan. Students will learn about financing a new business and the basic financial statements that permit evaluation of a business's performance.

SBM101 **Small Business Management**
This introduction to small business management describes the different forms of business ownership typically seen in residential construction along with the economic and government policy framework within which the industry operates. Aspects of financing and contract law are examined, while good purchasing and inventory control practices are outlined and analyzed.

SBM103 **Small Business Management**
This course introduces students to the fundamental principles and planning necessary in managing a small firm. Emphasis is placed on the preporation of a business plan. Business opportunities are assessed as well as management practices including marketing, financial matters, internal operations and tax management. The student will get involved in decision making using case studies.

SBM111 **Financial Management**
This course introduces the student to business practices relating to detailed financial record-keeping and performance evaluation. The student will be provided with the basic analytical tools to prepare, maintain and evaluate financial records.

SBM116 **Small Business Management**
This course introduces the student to basic business principles and will cover types of business ownership, contracts, insurance considerations, financial services, mortgages, invoicing and payroll.

SBM135 **Math/Small Business Management**
This course for fashion students combines a review of basic arithmetic — addition, subtraction, multiplication, division, fractions and decimals — with an introduction to pricing, markup, markdown and costing. Problems and situations related to the expenses and financial decisions involved in running a business are exomined.

SBM166 **Small Business Management**
This course introduces students to the basic principles involved in starting a small business: establishing the form of ownership, developing a financial plan, communicating effectively, contralling an enterprise and meeting federal and provincial tax and employment requirements.

SBM176 **Small Business Management**
As a continuation of SBM166, this course focuses on developing a marketing strategy for a small residential construction firm. Topics include market analysis, pricing, promotion and channels of distribution. Prerequisites: SBM166

SBM200 **Small Business Management**
This course involves sound business management through planning and budgeting, setting up accounts and preparing a prospectus for bank financing. The student learns that to operate for profit it is necessary to control the business according to plans. The student is taught how to advertise and promote sales, supervise, estimate, and mark-up and price for profit.

SBM201A/B **Small Business Management**
This two-semester course familiarizes the student in craft-oriented fields with the basics of setting up and running a small business. Major topics include preparing a business plan, selecting the appropriate legal form of business, evaluating alternative sources of financing, understanding marketing essentials and preparing a system of record-keeping and financial reports. The student will have the opportunity to carry out in-depth research and prepare reports on relevant business topics.

SBM232 **Mathematics/Small Business Management**
This course will help students improve their arithmetic and small business skills in order to become more efficient in money management, both from a business and o personal perspective. Course content includes the introduction of such concepts as balance sheets, payroll and deductions, bookkeeping and the procedures for starting a small business.

SBM402 **Small Business Management**
This two-semester course provides the student with an understanding of business essentials, including establishing o new business, business financing and record-keeping. The course helps the student understand the economic environment within which business operates and provides the tools for evaluating business performance.

SBM534 **Small Business Management**
This course consists of the following eight categories: technical description; work orders; the order form; telephone techniques; public relations; memos; job search; and the Occupational Health and Safety Act. Studying these topics will help the student effectively write, organize, and express given materials in a concise form and become aware of various health and safety roles from governing institutions.

SBM535 **Small Business Management**
This course introduces the student to the basics of setting up a small business. Topics include selecting the appropriate legal form of business, negotiable instruments, insurance and bankruptcy. In addition, this course will help the student to understand marketing, planning and risks in business.

SBM536 **Small Business Management**
This course gives students in refrigeration and air conditioning an overview of contract law. Topics include the requirements for an enforceable contract, discharge of contract, breach of contract, remedies for breach, secured credit, bankruptcy, negligence and torts, and the Construction Lieu Act.

SBM537 **Small Business Management**
A brief introduction to accounting basics, taking the student through the steps involved in preparing an income tax statement and balance sheet.

SBM566
See SBM166

SBM MODULE 1 **Entrepreneurship**
The main goal of this section is twofold: first, to gain an appreciation of the difference between entrepreneurs and managers, and secondly, to help the students decide which type of small venture owner they are, or will likely be. This understanding is important in the choice of new enterprise alternatives, which is explored later in this module.

SBM MODULE 2 **Introduction ta Business Basics**
This module is designed to provide the student with a "crash course" in the basic concepts and terminology of Canadian business. The focus throughout is on those topics which should be most useful to you throughout the Small Business Program.

SBM MODULE 3 **Market Research**
Module 3 introduces basic marketing and marketing research concepts and terminology. Students will gain an understanding of the purpose of marketing research and how it can help in solving problems, assessing opportunities and making more informed business decisions.

SBM MODULE 4 **Feasibility Assessment**
Successful completion of this module will provide the student with and understanding of whether their business concept can be expected to be financially viable and profitable. Feasibility assessment involves an investigation into the startup and operating costs for a business, and comparing these costs to the expected payoffs.

SBM MODULE 5 **Understanding Financial Statements**
The purpose of Module 5 is to provide the student with a basic understanding of the major financial statements. The module begins with the personal financial statements for an individual and then examines the financial statements for a business.

SBM MODULE 6 **The Business Plan**
This module develops the students understanding of the different types of business plans, their uses, and the people who use them; then, it helps students to begin their own business plan with their specific needs in mind. Students are also provided with a procedure to follow the development of their plan, and actually begin to write several sections of their business plan.

SBM MODULE 7 **Organizing the Business**
Module 7 is designed to acquaint the student with the most common legal forms of business ownership, namely the proprietorship, the partnership and the corporation. This module will also help the student to assess the suitability of each legal form for their small business. Students will also become familiar with the procedures for registration of their business and for incorporation.

SBM MODULE B **Buying an Existing Business**
Buying an existing business is one of the options which anyone intent on owning a business should consider. This module introduces the student to the many factors to be considered in the search for an evaluation of possible existing business opportunities.

SBM MODULE 9 **Buying a Franchise**
Once the student has established their own small business, they must choose from among the following three alternatives: start from scratch and develop a new business; buy a business that is currently in operation; purchase a franchise.

SBM MODULE 10 **The Marketing Plan**
This module provides the student with a framework for the completion of their draft marketing plan. Although a marketing plan should be relatively complete at the end of this module, there may be some changes which are later necessary due to new information which becomes available. Moreaver, they may also discover that work in later modules necessitates alterations to the marketing plan.

SBM MODULE 11 **Location Strategy**
"Location, Location, Location" is the oldest axiom in retailing and no doubt has a great influence in the service and manufacturing industries also. Given the relatively high cost of real estate and leasing costs, the selection of a suitable business location for the venture can no longer be left to chancel in order to select a proper location, first consider the nature of the product or services.

SBM MODULE 12 **Financial Plan**
This module is designed to assist the student in setting the opening financial position, the anticipated results for one year on an income and cash flow basis and to establish a projected one year financial close position. A key module for the business plan and the pursuit of any outside financing sources.

SBM MODULE 13 **Income Tax**
This module is designed to introduce the student to some of the basic principles and concepts of the Income Tax Act and related statutes with particular emphasis on self-employed income and expenses, and taxes payable by a small business corporation. This module will introduce the basic principles of income tax planning.

SBM MODULE 14 **Other Taxes**
This module will introduce the students to some of the other taxes that are payable by small businesses. The taxes covered in this module include The Goods and Services Tax, Sales Tax, Payroll Taxes, Workers' Compensation and The Employer Health Tax.

SBM MODULE 15 **Human Resources Legislation**
As a small business owner or manager in Ontario, Human Resource practices and policies are controlled to a great extent by government laws and regulations. Learn the necessary information about the Employment Standards Act, Human Rights Code, Pay Equity Act, Occupational Health and Safety Act, Workers' Compensation Act, Retail Business Holidays Act and Labour Relations Act.

SBM MODULE 16 **Networking and Time Management**
Learn the value of both networking and effective time management, the networking process and those organizations which can help network. Instruction is given in the development of a personal networking plan.

SBM MODULE 17 **Selling and Presentation Skills**
While many entrepreneurs may believe they have the product that "sells itself" or a business plan that has been prepared without any missing information, ultimate success will not occur unless revenue is generated.

SBM MODULE 1B **Customer Service**
Customer service is considered by many to be one of the most important elements of a small business operation. With the increasing level of competition in business, customer service has evolved into a dynamic process, covering such areas as inquiry, consultation, complaints, purchase decision and follow-up. This module brings together the key elements of customer service.

SBM MODULE 19 **Government Assistance**
Learn about the many types of government assistance which are available, develop an understanding of the ways in which information on such help may be obtained. A variety of specific assistance programs are described, as are several key government organizations (for those seeking help). Tips on obtaining assistance are also provided.

SBM MODULE 20 **Legal, Regulatory and Licencing Issues**
This module focuses mainly on the licensing requirements of small businesses at the municipal, provincial and federal levels. The module does not attempt to identify all licenses of legal issues; however, the most frequently used or most vital for the majority of small business types are described.

SBM MODULE 21 **Procurement and Inventary Management**
The purpose of Module 21 is to introduce the student to buying and the buying function. It is hoped that buying goals are with a strong customer orientation which will co-ordinate with merchandise, the image of the business and the personnel, in order to offer the clientele o unique yet suitable offering at a profit for the business.

SBM MODULE 22 **Camputer Literacy**
The student will achieve o basic understanding and experience practical work in the use of Lotus 1-2-3 and WordPerfect. The purpose is to give the student the ability to use the computer to put together the final Business Plan. Topics covered include spreadsheet use and page writing.

SBM MODULE 23 **International Marketing**
This module was designed to orient entrepreneurs to the basics of international trade. Market research (Module 3) and strategy are examined, as well as selected aspects of finance, contract negotiations, trade logistics, and business communications.

SC101 **Engineering Science I**
This course covers: definitions of fundamental physics quantities and related units; force, acceleration, pressure, density; displacement, velocity and acceleration; Newton's Laws; rectilinear motion; rotational motion; kinetics; characteristics of a force; vector representation of a force; resolution of forces; resultant of o force system; principles of moments; couples; free body diagrams; equilibrium; properties of areas; centroids; moments of inertio; friction; work and machines.

SC121 **Integrated Science (Chemistry)**
This course introduces the student to the basic principles of chemistry, then applies the knowledge to the study of chemistry in paper and paper-making, photography and photo-processing and inks and pigments.

SC129 **Explarations in Science**
This course will give the students an overview of science. Emphasis will be placed on the impact of modern industry on the environment. Ecological principles will be developed to provide the background needed to understand present issues and concerns.

SC201 **Engineering Science II**
This course includes the following topics: rectilinear motion, rotational motion, kinetics of rectangular motion, properties of solids, shear force and bending moment diagrams, stress and strain.

SC202 **Natural Science Project**
An advanced research project in the natural sciences.

SC223 **Engineering Science III**
This course includes the following topics: thermal stresses, stresses in compound bars and thin shells, stress concentration, Poisson's ratio, factor of safety, longitudinal bending stresses, torsian of circular shafts, close-coil springs, welded and bolted connections, testing procedures, deflection of beams and columns.

SC231/232 **Quality Control**
Students learn the physical and chemical principles involved in paper testing and ink manufacture in the graphic arts field. The student will begin with an introduction to statistics and the mathematics of sampling. The principles are then illustrated by an experiment in sampling. The student will then carry out a series of experiments on o particular paper sample. A final report on the paper is submitted and similar tests are conducted for the ink portion of the course.

SC311 **Engineering Science IV**
This course includes the following topics: curvilineor motion; momentum, energy and power; friction; mechanical vibrations; dynamics of motion.

SC321 **Engineering Science V**
This course includes the topics: combined stresses; Mohr circle for stress; analysis of thick-walled cylinders; deflection of beams by the double integration method; Macauley's method; continuous beams and the three-moment equation; strain energy and dynamic loads.

SC504 **Basic Electranics**
This course teaches the theory of vacuum tubes (high vacuum and gas filled), circuit analysis, semi-conductor theory and applications, transistor fundamentals and circuits, amplifiers, oscillators and photo detectors. The student will conduct installations and simple repairs of electronic equipment.

SC50B **Integrated Science**
This course is intended to introduce the students to relevant basic principles of chemistry and physics. This knowledge is applied in the study of three related Graphic Arts applications: paper and paper-making, photography and photo-processing, and inks and pigments.

SC530 **Science**
This course is designed to give the student an introduction to basic general science and to develop and understanding of simple scientific principles. It includes chemistry, biology, mechanics, heat, electricity and light.

SC552 **Power Plant Applied Science**
This course establishes the foundation in mathematical skills needed for the student to understand the use of formulas, area, volume, heat, the temperature principles of thermodynamics, and steam tables and the calculation of heat transfer.

SCR530 **Stack Control and Receiving**
In this course the hospitality student learns about the storage requirements and receiving techniques of a variety of common bokery ingredients.

SEC111 **Security and Safety**
This course provides a basic knowledge of key control systems, identifying and correcting hazordous situations, relationships required with municipal and provincial authorities and Landlord and Tenant Act considerations.

SERV103 **Faad and Beverage Service I**
Food and beverage service is fundamental to any hospitality operation and a significant revenue source. In this course, the student will learn and demonstrate basic service skills, and the self-discipline and attention to personal appearance that is critical to success in this industry.

SERV113 **Faad and Beverage Service II**
This course is a continuation of SERV103. The student learns and demonstrates dining room skills. The professional standards required in the industry are fine tuned. The student will also learn how to do tableside work. Prerequisite: SERV103

SERV206 **Canventian and Banquet Service**
This course provides the student with insight into the operation of the Convention, Catering and Banquet department of a hotel or foodservice organization. Students will learn how managers of these departments plan for specific functions.

SERV207 Advanced Faad and Beverage Services
Those involved in managing food and beverage operations must understand the basics of service in order to hire, train and supervise service staff, and to perform service as a manager "on the floor." In this course the student will learn to take full responsibility for the positions of service captain, bartender and host of the dining room. The student will approach food and beverage service from o manager's perspective. Prerequisites: SERV103, SERV113.

SERV400 Italian á la Carte Kitchen and Dining Raom Service
During the final block of the semester, students demonstrate their newly acquired knowledge of Italian cuisine by developing special menus featuring Italian cuisine and wines for the College dining room.

SERV576 Dining Raom Organization I
In this course, the student learns the fundamentals of dining room operation, the basic elements of service, the roles of front of the house staff and how to market in the dining room.

SERV577 Basic Dining Raom Service
This course prepares the student to properly set up and service o formal dining room. Through supervised performance in on actual dining room, the student will apply the basic elements of service, and demonstrate the self-discipline and attention to personal appearance that are critical to success in this industry.

SERV586 Dining Room Organization II
In this course, the student explores the workings of a dining room from a supervisory perspective. The student learns to respond as o manager to whatever presents itself in the dining room, and includes how to perform tableside preparations.

SERV587 Dining Raom Service II
In this course, the student will improve service skills to the professional standards of a high quality dining room. The student will also learn to perform the leadership role and tableside function of o dining room host, o bartender and a service captain. Prerequisite: SERV577.

SEW141 Sewing Technalogy
This course focuses in the use of the industrial sewing machine in the manufacturing environment. Students will develop the required skills to operate competently o variety of industrial sewing methods followed by a complete range of samples.

SEW156 Sewing Laboratary - Advanced
This course continues the development of industrial sewing skills. The student will make use of available knowledge using specialized equipment in the construction of a pre-cut swim suit, stylized swim suit and leather skirt.

SEW562 Sewing Machine Operation I
This course will introduce the student to the industrial sewing equipment used in all the sewing programs in the Creative Fashion Department. The student will apply these new sewing skills to the construction of several practice exercises and o variety of samples, including pockets, yokes, collars, sleeves and hem finishes.

SEW563A Sewing Machine Operation II
In this course, the student will continue to learn how to make samples relating to the construction of the project. The student will also learn how to assemble a pre-cut blouse and two stylized blouses using the some industrial machinery as used in SEW562. The course encourages the student to develop the necessary speed and accuracy required in a professional environment.

SGL100 Student Government Leadership
An elective (without closs time) that encourages Community Worker students to involve themselves in the various governing and political structures of George Brown College.

SGL101
See SGL100

SH104 Shorthand Theory
This course enables the student to acquire and develop the skill of recording spoken English using Forkner shorthand strokes, symbols and characters.

SH208 Shorthand, Dictation and Transcription
This course will concentrate on the skills required to record spoken English at o minimum shorthand speed of 60 words per minute over o three-minute period using Forkner shorthand and to transcribe the shorthand notes with 95% accuracy.

SHM102 Machine Shorthand Theory
This course will enable the student to develop the posture and fingering necessary to develop the skills required to write clear, concise, accurate outlines on the Stenograph machine, and to read and transcribe machine shorthand notes.

SHM202 Shorthand Speed Development III
This course will concentrate on the skills required to develop o minimum machine shorthand speed of 140 words per minute on two-voice testimony, jury charge and literacy material.

SHM300 Shorthand Speed Development IV
This course will concentrate on the skills required to develop o minimum machine shorthand speed of 160 words per minute on two-voice testimony and jury charge.

SHOW201 Showcard Writing
This course presents those techniques, methods and materials used in a professional showcard studio. The student uses typefaces chosen for their ease and speed of execution. The specialized function of the showcord in advertising by theatres, retail stores, conventians and the hospitality industry is studied. Special emphosis is put on display lettering and special effects such as animation. The latter part of the course includes the study of calligraphy and manuscript writing for diplomas and certificates.

SIGN101 Signwriting
The student develops skills with pencil and lettering brush. The essential typefaces are studied, as well as the various materials used in the sign industry. Projects are mainly point-of-purchase signs such as paper banners and pasters.

SIGN201 Signwriting
The student integrates lettering and graphic symbols produced by various methods in the production of signs. The student selects from and combines such methods as hand-lettering, pressure sensitive materials, masking-cut-spray, screen printing, computerized and engraving equipment and manufactured or handlettered wood, plastic and aluminum letters.

SIGN545 Signwriting
This course continues the hand-down method of lettering and introduces lettering with the showcard brush. The emphasis is on typography, the selection of proper typefaces and the imaginative use of colour.

SIGN546 Faundation Art
The student is taught o schematic method for the conventional representation of three dimensions on a flat surface. The course consists of drawing such simple geometric solids as cubes, spheres, cylinders and cones, developing complex forms by combining the basic forms, applying one, two and three point perspective to geometric forms and modelling in light and shade. This course is preparatory to ART201 and ART210.

SIGN547 Design and Calaur
Learn to develop basic layout ideas into more complicated designs, the relationship between trademarks, logos and blocks of copy and the sign, showcord or poster format, design layouts for various projects using formal and informal layouts, design unified layouts with proper stress on specific parts of the copy, colour value scales and colour wheels, colour mixing and creating colour schemes for projects.

SIGN549 Signwriting
This course develops basic skills with pencil and lettering brush. Essential typefaces are studied and the student learns to draw correctly formed and proportioned Gothic (block), Helvetica, Slash, Script and Roman. Practice work with o pencil alternates on a regular basis with developing skill in using the quill and maulstick. Projects incorporate the simple (basic) layout ideas studied in SIGN547.

SIGN550 Lettering
This course develops lettering skills. The projects are specifically designed to develop the student's ability and confidence, on which free-hand lettering depends. The quill and hand-down methods are used. Lettering with pens assists the student to develop lettering skills and to solve spacing problems and weight distribution. There is emphasis on typography and on introduction of basic layout.

SIGN551 Screen Printing
This course introduces students to the theory and practice of screen printing in the sign industry. Handcut stencil systems and the practice of techniques involved in these systems form the main port of the basic course. The student receives hands-on experience constructing screens and printing simple one-colour prints.

SIGN553 Signwriting
This course familiorizes the student with some of the various materials used in the sign industry. The emphosis is on developing the student's lettering ability. The projects are mainly point-of-purchase signs such as paper banners and posters. Materials such as hardboard and plywood, which the student learns to prepare for lettering, are introduced in the lotter port of the progrom.

SIGN554 Screen Printing
This course continues proctice of knife-cut stencil techniques. The student becomes familior with the basic tools and materials used and studies layout and registering systems for multi-colour printing. Practical experience screening close tolerance multicolour signs forms the main port of the course.

SMM500 Sewing Fundamentals
Learn about the various types of stitches, seams, industrial sewing machines, needles, threads and fabrics used in the sewn products industry, reproduce the stitches by hand then by industrial sewing machine, how to sew and control the machine at different speeds, seams, needles, fabrics and threads, different manufacturing processes used and their applications.

SMM502 Drive Unit
This course teaches the examination and dissesembly of motors. It includes the terminology, functions and properties of components, wiring, connecting and reassembly. Simple repair procedures and maintenance requirements are also taught. The student will practice on apparel machinery and their motors in use in the apparel industry.

SMM503 Basic Lockstitch I
The student will practise disossembling, assembling and repair of simpler types of horizontal axis lockstitch sewing machines currently in use in the apparel industry.

SMM509 Practical Applications
This course is designed to provide the student with a hands-on simulation of o factory setting. During o sel period each week, the student is assigned the responsibility of a classroom laboratory containing industrial sewing machines on which they are required to carry out preventative maintenance and some minor repairs, with minimum supervision.

SMM510B Basic Lockstitch II
The student will learn stripping down, reassembly and repair of the more difficult types of locistitch machines with the emphosis on vertical axis equipment.

SMM511B Basic Chainstitch Machines
These courses are designed to show students the difference between the various types of chainstitch machines used in the sewn products industry and their purpose. Students are instructed on the different looper mechanisms used to perform the stitches and the different methods required to time each machine, also covered will be the dis-assemble and re-assemble using machine schematics.

SMM514B Bar Tack Machines
This course teaches onalysis and evoluation of bar tack machines, including operating characteristics, construction, disassembly, assembly, repairs, maintenance and related functions. Conversion of bar tack machines to perform specialized tacking functions is practised.

SMM516A Preventative Machine Maintenance
Using lecture-video presentation and proctical demonstrations, the student will be instructed on methods and techniques used to carry out basic preventative maintenance on sewing and related equipment.

SMM517A Electronic Sewing Equipment
The student will separate the components that make up o programmable sewing machine, involving the removal of the control box and synchronizer from the machine. Once these components have been removed and evaluoted as to their condition, the student will then proceed to install the control box, motor and synchronizer as outlined in their manual and confirm that all the settings are correct.

SOC102 Mass Media and Culture
The aim of this course is to provide the student with an opportunity to develop aworeness of the various types of media and of the ways in which we affect the media and the media affect us as a society. We will look at how the communication process works on an individual and mass scale; as well, we discuss how the different types of media are composed and how they function.

SOC106 Introductory Sociology
This course examines how behaviour of the individual is influenced by the social groupings to which she/he belongs. The course is designed to develop an appreciation of the influences of key groups such as family, cultural groups, gender and formal organizations.

SOC126 Political Sociology
This course is designed for the student who wants to gain an overview of Canada's political system and a better understanding of current social and political issues. The course combines o variety of teaching opproaches, including seminar discussion and field trips, to familiarize students with the political process in Canada and to develop skills for analyzing political events and contemporary issues.

SOC127 Sociological Perspective
This course introduces students to the sociological perspective and uses it to examine the relationship among individual life experience, current public issues and changing social institutions, with an emphosis on Canadian society.

SOC172 Introduction to Sociology
This course will identify the basic perspectives of sociology Students will examine these perspectives os they relate to the various aspects of Canadian society.

SOC200 Social Science Project
An advanced research project in the social sciences.

SOC202 Social Science Project
An advanced research project in the social sciences.

SOC203 Family and Kinship
This course examines family in terms of a small group, o social institution with brood cultural variations, and the many changes and controversies it is undergoing.

SOC204 Sociology of Women
This course explores and critically evoluates some of the major issues of the women's movement bath past and present. The historical dimension of women's struggle for emancipation will be examined. Philosophical perspectives and cultural traditions will be evaluated in order to determine what effect they have had on women's self understanding as well as on their role in society.

SOC205/206
See SOC204

SOC240 Sociology
This course introduces the student to the longuage and practice of sociology. The course examines basic concepts, research and theories in sociology and uses them to explore our everyday life experiences and their relotion to the cultural communities and social institutions that make up the wider Canadian society. Topics include the sociological perspective, culture, social actor, organizations, poverty, wealth and stratification, gender relations, family and deviance.

SOC242 Sociology II: Social Inquiry
This course is offered to students who have completed o one-semester course in sociology. The student will goin o more extensive understanding of contemporary theoretical approaches and their use in anolyzing everyday social interactions and the changing institutional structures that make up modern society. Topics include sociological inquiry, mass media, Canadian politics and the state, work and occupations, social control and social movements. Prerequisite: SOC1011, SOC2401, SOC240 or equivalent.

SOC301 Sociology of Health Care
This course explorers contemporary themes and issues regarding health, illness and health care in terms of their relotion to society and culture, with o particular emphosis on Canada.

SOC951 Life Skills
The purpose of this course is to help students ossess themselves and develop their skills to cope with the responsibilities of college life. Some of the topics discussed are time management, self-assessment, self-esteem, stress management, and dealing with anger.

SP201 Advanced Screen Printing
This course studies the compotibility of stencil systems, types of ink and substrates. Students print on o variety of materials, including wood, glass, plastics, pressure sensitive materials and textiles. Projects are assigned which are typical of screen printed work done in the sign industry. Photo-stencil techniques are introduced. The student prepares positives with rubylith film, ink drawings on acetate and transfer lettering. The course includes instructions in the use of a process camera and in development of high contrast film.

SP526 Basic Mechanical Layout and Typography
This course explores the basic fundamentals of colour theory, mechanical and creative layout, design, and typography essential to effective graphic communication by screen process reproduction. The student is trained to execute mechanicol layout as well as basic colour mixing, while exploring the theory behind effective creative layout and mechanicol artwork.

SP527 Photamechanical Reproduction
Learn about photomechanical stencil systems and processing, darkroom procedures, process camero operation, line film processing and development, select on appropriate photastencil, execute processing, perform exposure tests to establish a permanent handling and processing system to attain optimum reproductive results, operate o process camera, calculate size and exposure time, and process and develop line film to the appropriate density and sharpness.

SP528 Basic Stencil Film Impasition
Learn the functions of the screen frame, fabric, stencil, job planning, manual film cutting, screen frame assembly, fabric stretching and multiple mechanicol layout for both single and multicolour reproduction, plan and execute mechanicol layout, placing all necessary reference and registration marks in position, incorporating colour traps and bleeds in manual film stencil cutting.

SP529 Basic Manual and Mechanized Press Operation and Praduction
Learn hand press set-up procedure, the functions of a printing press and its components, printing, ink coating blades and printing the manually cut and indirect stencil, match colour and mix ink with the appropriate solvents to its proper viscosity and to execute a press set-up and select the proper printing blade, the techniques of manual printing, wash-up and screen reclaiming.

SP530 Advanced Manual and Mechanized Press Operation and Praduction
Learn to execute o press set-up and production run with minimum instructor assistance, supervise and control o production run for both job specifications and quality, ink and substrate compotibility and testing and proofing techniques.

SP531 Advanced Film Impasition
Learn about stripping and assembly of final film positives, evoluate mechanicol artwork, understand colour breakdown and establish o production procedure for the complete processing and final assembly of film positives for multi-colour production, the use and selection of screened mechanicol prints and their respective percentages, close cropping and film retouching, plan and develop mechanicol layouts for both single and double-sided printing applications.

SP532 Intermediate Manual, Mechanized and Photamechanical Pracessing
Learn to operate o semi-automotic press with instructor assistance, execute o press set-up and production run employing quality control and problem-solving techniques, evaluate and process photomechanicol direct and indirect stencil systems employing exposure calibration and proofing techniques and wash-up and reclaiming procedures.

SPEC300 Specifications 1
Gain o thorough knowledge of building specifications, including format, contents, longuage, compilation and assembly.

SPEC301 Specifications 2
Learn the basics of architectural business practice, typical project phases from client contact through to construction bid solicitation. Prerequisite: SPEC300

SPMK400 Applications in Spart Marketing
Learn to integrate modern marketing theory with the sports industry, marketing sports products and services and the use of sport and sport-related activities to market consumer and industrial products, overview of the sports industry, characteristics of sports marketing and sports products, product extension programs, the sports marketing macro and micro environment, elements and coordination of the sports market and, public and media relations.

SPMK401 Sport and Society
Examine the role of organized sport in the community and its influence on our culture, history of sport and physical education, infrastructure of sport in Canada and abroad, Canada's relationships and affiliations with international sport governing bodies, operation of sport organizations both amateur and professional and trends and issues in contemporary sport.

SPMK402 Sports Marketing Management
Gain o review of concepts, procedures and techniques pertaining to marketing management in general and introduces aspects which apply specifically to the field of sports marketing and event management, research, promotion, distribution, selling, use of media, marketing programs for special-needs groups, and the development, implementation and evaluation of integrated sports marketing programs.

SPMK404 Sports Event Planning and Management I
The student must secure college-approved employment with an organization/firm (min. 300 hours) for hands-on experience in management of a sport product or event. Discussion topics include development and presentation of sports events proposals, control system for sports events, identifying and rectifying hazardous situations, relationships with municipal and provincial authorities and other regulatory bodies, insurance and product liability issues. Students must present a workshop based on co-op work experience and submit periodic reports.

SPMK405 Micracamputer Applicatians far Sports Marketing
In this course the student is introduced to the use of micracomputers and popular software packages. A variety of software products including spreadsheet, database, and wordprocessor are used. Exercises and assignments are designed to develop the skills required both in the program and on the job.

SPMK410 Applied Interpersanal Skills
Learn to deal with specific interpersonal challenges faced by sports marketers and developing confidence for effective interpersonal and communication skills, communication theory and relationship management, preparing and delivering informative and promotional presentations, negotiating tactics and professional selling skills. Prepare and deliver a series of videotaped presentations based on a sports product or event.

SPMK411 Media Applications in Sport
Examine the operations associated with both electronic broadcast media and print media, the practical and technical aspects of producing and marketing a sport broadcast as well as managing effective relations with media organizations, financing a sport broadcast, network and independent broadcast productions, technical and support functions for a broadcast, marketing issues and strategies for a sport broadcast, print media facilities and management strategies.

SPMK412 Licensing and Merchandising Spart Products
Examine the merchandising issues and strategies for sport products, including the rapidly growing area of licensing sport products, consumer behaviour, product mix, depth and season, merchandise presentation, customer service strategies and tactics, cooperative advertising and promotion, licensing opportunities and how to negotiate licensing agreements.

SPMK414 Sports Event Planning and Management II
This course builds on the field experience acquired in SPMK404 and follows the same workshop and reporting format. It provides a vehicle for applying the concepts and practices introduced throughout the program. The student may continue with the organization or the firm they worked with in the first semester or seek employment elsewhere, subject to approval of the college. A minimum of 300 hours (confirmed by the host organization) is required to graduate from the program.

SPMK416 Financial Management far Sports Marketing
Financial statement analysis, planning and forecasting, leverage and break-even analysis, management of working capital, capital budgeting, financing sources, staffing and the management of liability and risk.

SPPE1005 Power Plant Electricity and Instrumentation I
Learn about the various flow, pressure and temperatures encountered in power plant operation and the instrumentation used to measure the various parameters. A broad introduction to electricity, study the safety aspects of electricity, generation of electricity, types of electrical wires, study series, parallel and combination circuits, carry out actual wiring and testing of electrical circuits, electrical wiring diagrams.

SPPE1006 Power Plant Bailers and Auxiliaries I
Learn the various Acts and Regulations which govern the safe and efficient operation of o steam power plant. The student will learn the various construction details of the equipment which is used in o steam power plant.

SPPE1009 Power Plant Chemistry I
This course is an introduction to basic chemistry required to obtain an understanding of the various fuels, their methods of combustion, along with the chemistry and theory of water treatment and control.

SPPE1012 Power Plant Operation - Phase I
This course constitutes a practical laboratory that introduces the student to the basic operation of a steam power plant. The student will become familiar with the safe operation of equipment and how it is interlaced to operate as an integral steam power plant.

SPPE1013 Power Plant Maintenance - Phase II
This course constitutes a practical shop setting that teaches the student shop safety and the safe operation of shop tools in the maintenance shop. Identification of shop tools, pipe, pipe fittings and repairs to varied high pressure valves.

SPPE1014 Power Plant Integrated Computer Control Systems I
This course teaches the basics of computer operation, the operation of the personal computer along with industrial application, resetting and loading operational programs, methods of operational scanning.

SPPE2002 Power Plant Applied Science I
This course lays the foundation in mathematical skills for the student to understand and to apply formulas, calculate area, volume, heat, temperature. Principles of thermodynamics, steam tables and the calculation of heat transfer.

SPPE2004 Power Plant Heating, Refrigeration, Air Conditioning II
This course introduces the student to compression of various gases along with the various types of compressors. Included is the refrigeration cycle, classes of refrigerants, heating and air conditioning. Safe operation and control of various systems.

SPPE2007 Power Plant Applied Mechanics I
This course introduces the student to various internal combustion engines, construction of various engines, their operation, maintenance requirements including lubrication and fuels.

SPPE2022 Power Plant Operation - Phase II
This course constitutes a practical laboratory where the student will develop practical operational skills, operates and tests all safety devices, conducts water and combustion analysis along with computer supervisory Total Distribution Control.

SPPE2023 Power Plant Maintenance - Phase II
This course constitutes a practical shop setting where the student will learn maintenance skills in pumps, steam traps, steam turbine repair and gasket installation and develop basic skills in welding and flame cutting.

SPPE2024 Power Plant Integrated Computer Control Systems II
This course continues the development of all skills required to understand and control the operation of personal computers interfaced with industrial automated control systems in power plant operation. Alarm scanning, interface and data transmission. Use data from industrial control system in spreadsheet programs.

SPPE3010 Power Plant Operation and Design Phase I
This course constitutes a practical power plant laboratory. The student will be accountable for the safe operation of all power plant laboratory equipment. Plant inspection. Use calculation to determine safe working pressures, pipe calculations, steam and equipment efficiencies.

SPPE3011 Power Plant Mechanical Maintenance - Phase III
This course allows the student to use the acquired shop maintenance skills to be used in maintaining the power plant laboratory equipment. The student will take part in rebuilding or repairing a shop or laboratory project. Use computer based software to select inventory items for repair projects.

SPPE3014 Power Plant Integrated Computer Control Systems III
Students will learn the technique of industrial computer operation by changing set-points, changing from remote to manual control. Carry out assignments and design models from the laboratory performance objectives using the interface system and application software.

SPPE3002 Applied Science II
This course is designed to enable the student to understand algebraic expressions, force and motion, potential and kinetic energy, expansion and cammpression of gases and solids. Techniques and instrumentation used to measure heat and heat used.

SPPE3004 Power Plant Heat, Refrigeration and Air Conditioning II
This course introduces the student to the theoretical operation of steam and hot water systems, air conditioning systems, classification of refrigeration systems. Safety regulations, auxiliary equipment and system maintenance.

SPPE3007 Power Plant Electric's and Instrumentation II
This course introduces the student to various types of flow measuring devices, such as pitot tube, velocity meters, single, two, and three element level measuring devices. Importance of temperature measurement and control at superheater, reheater and desuperheaters. Operation of A.C., test electrical circuits and safety devices. Checks practical wiring circuits for electrical faults using meters and schematics.

SPPE4001 Power Plant Supervision and Management
This course introduces the student to power plant management skills, power plant project installation charts, types of records, legal requirements. Provincial acts and regulations. Health and Safety Acts. Work orders, maintenance requests, preventative maintenance. Budgets development guidelines.

SPPE4005 Power Plant Boilers and Auxiliaries II
This course will concentrate on construction and operation of large power plant installations. Classification of plants, component of large steam generators, pumps and piping systems. Chemical cleaning of boiler campanents.

SPPE4006 Power Plant Applied Mechanics II
This course will introduce the student to steam and gas turbine fundamentals along with internal combustion engine operation and maintenance. Turbine classification, turbine parts, principle of operation of turbines, internal combustion engines and auxiliaries.

SPPE4008 Power Plant in Plant Training
This course continues the development of skills introduced in the program to allow the student to participate in On Job Training. The student will spend two months in industry in a registered steam plant where the student will become part of the operational and maintenance team.

SPPE4010 Power Plant Chemistry II
In this course the student will calculate theoretical air supply for combustion used with different fuels. Control of combustion air supply and flue gas analysis. Types of water conditioning systems along with sampling and methods of water treatment.

SPPE4010 Power Plant Communications
Students learn the techniques involved in writing approaches, sentence structure and style, effective writing, planning for report, report format and report writing, specification sheets, employment applications, assessment reports and effective resume writing.

SPPE4020 Power Plant Design Operation II
This course constitutes a practical laboratory where the student develops operational and management skills required to operate the power plant equipment for maximum efficiency. Performs calculations on water and fuel used. Test safety devices and supervises plant operations.

SPPE4024 Power Plant Integrated Computer Control Systems IV
In this course the student will use the skills developed in steam plant operation to design operation log reports, inventory and cost control, log sheets and shift schedules. Process remodelling using computer simulation.

SPPE4025 Power Plant Mechanical Maintenance - Phase IV
This course allows the student to further develop the acquired shop maintenance skills to take port in a major shop projects using computer based maintenance management and maintenance inventory control methods.

STAT1107 Power Plant Lubrication and Internal Combustion Engines
This course introduces the student to various internal combustion engines, and the construction of various engines and their operation and maintenance requirements, including lubrication and fuels.

STAS549 Power Plant Laboratary
This course constitutes a practical laboratory that introduces the student to develop practical operational skills. The student will operate and test safety devices and conduct water and combustion analysis along with computer supervisory Total Distribution Control.

STAT555 Power Plant Mechanical Maintenance
This course is an introduction to basic chemistry which is required in order to have an understanding of the concepts of the various fuels, their methods of combustion, and the chemistry and theory of water treatment and control.

STAT556 Power Plant Bailers and Auxiliaries
This course introduces the student to the various acts and regulations which govern the safe and efficient operation of a steam power plant. The student will learn the various construction details of each piece of equipment which is encountered in the design of a steam power plant.

STAT557 Power Plant Heating, Refrigeration and Air Conditioning
This course introduces the student to compression of various gasses along with the different types of compressors used. Included is the refrigeration cycle, classes of refrigerants, heating and air conditioning, and the safe operation and control of various systems.

STAT558 Power Plant Instrumentation I
This course introduces the student to the various flow, pressure and temperatures encountered in power plant operation and the instrumentation used to measure the various parameters.

STAT559 Power Plant Lubrication and Internal Combustion Engines
This course introduces the student to various internal combustion engines, the construction of various engines, and their operation and maintenance requirements, including lubrication and fuels.

STAT560 Power Plant Chemistry II
In this course the student will calculate theoretical air supply for combustion used with different fuels; control of combustion air supply and flue gas analysis; and the types of water conditioning systems along with sampling and methods of water treatment.

STAT561 Power Plant Integrated Computer Control Systems
This course teaches the basics of computer operation; the operation of the personal computer along with industrial applications; resetting and loading operational programs; methods of operational scanning; and industrial automated control systems used in steam power plant operation.

SURG203 Local Anaesthesia and Soft Tissue
This theoretical course is offered in semester IV of the Chiropody program. The course content focuses on local anaesthesia, the nervous system and nail surgery.

SURG305 Medicine and Surgery
This course is designed to develop the students' understanding of the relationship and implications of specialized medical practice on chiropody.

SURV102 Quantity Surveying I
This course is an introduction to quantity surveying. Students will develop the preliminary skills required to prepare a bill of quantities.

SURV110 Surveying
This is an elementary course in surveying, including the fundamentals of plane surveying and the use and care of equipment.

TECH302 Case Presentations of Clinical Processes
This course represents the focus of establishing an integrated curriculum by giving students experiences in presenting how they have related and incorporated scientific rationale into practical applications as applied to patient care in Denture Therapy.

TECH402 Supervisory Techniques
In this course, the student will come to understand the role of the foodservice supervisor in the organizational structure. The principles of human relations and the application of management tools are discussed.

THEA100 Acting I
The course covers: carefully graded improvisational exercises designed to liberate the student from self conscious fears and pretence; story telling; and basic introduction to text analysis.

THEA101 Acting II
The course covers: beginning scene study; introduction to Shakespeare; neutral mask (releasing imaginative impulses, etc.); poetry; and vocal masque (exploring the individual entertainment potential of each student working independently under supervision to create a solo presentation).

THEA102 Dance I
The course covers a practical study of the five basic elements of dance: co-ordination, motivation, animation, suspension and relaxation.

THEA103 Movement I
The course covers the dynamics of physical co-ordination as related to the theatre; development of free, imaginative expressivity, stamina, and control; phrasing, dynamic, intent. The course is continued in THEA123, 223, and 243.

THEA106 Vocal Music I
This course introduces basic music theory and sight reading and beginning choral singing. This course continues in THEA113.

THEA107 Voice I
Students learn to free their natural, correct, individual vocal tone through correct breathing, placement, and use of resonators.

THEA108 Castume History
The course will provide a working knowledge and practical understanding of clothing and attire from primitive man ca. 4000 B.C. to the present.

THEA112 Speech I
A detailed study of the shaping of individual speech sounds through the use of the International Phonetic Alphabet and the establishment of natural received North American speech free of dietects and regionalism.

THEA113 Vocal Music II
This course continues THEA106.

THEA115 Dance II
The course covers a variety of styles and techniques related to the needs of the actor-dancer. Continued in THEA203.

THEA117 Theatre History I
The course covers a study of the principal currents and eras in (mainly) Western theatre and drama, from ancient Athens to the present.

THEA118 Stage Cambat I
This course introduces basic principles of simulating stage violence. The course emphasises co-ordination, control and safety, hand-to-hand combat and use of quarterstaff.

THEA119 Graup Improvisation
The course covers stimulation and response to impulse; awareness, sensitivity, trust; opening up and sharing of individual creativity, passing on the focus; ensemble.

THEA121 Contact Improvisation
The course covers combining skills developed in other classes in imaginative and daring ways; invention and responsive generosity in both physical and vocal interaction.

THEA122 Voice II
This course develops flexibility, range, and power in the student's voice.

THEA124 Speech II
This speech course begins dialectology.

THEA200 Acting III
The course covers: naturalism (intensive scene study concentrating on naturalistic technique and styles in material drawn from the modern and contemporary repertoire).

THEA202 TV and Film Technique
The course introduces the medium of screen performance (acting, announcing, interviewing, etc.) and covers the basic principles of television production. A tape is made of each student's achievement at the end of the course.

THEA205 Radio Techniques
The course covers basic microphone technique and explores all areas of radio performance. A tape is made of each student's achievement at the end of the course.

THEA207 Business of Acting
Instruction in career management such as techniques of soliciting work (resumés, photographs, letters, follow-ups, etc.); dealing with agents, managers and casting directors; professional associations and unions; governments, taxes, mortgages, insurance, etc.; work etiquette and audition techniques.

THEA208 Acting IV
The course will cover: period study (an intensive exploration into heightened characterization and style combining historical research into a chosen period); clowning; character mask (developing the imaginative capacity for transformation through use of half-masks); and vocal masque (see THEA101).

THEA212 Dance IV
The course covers requirements of music theatre, tap and jazz.

THEA216 Vocal Music III
This course continues THEA113, with emphasis on scene work in connection with THEA220.

THEA217 Theatre History II
See THEA117

THEA218 Stage Cambat II
The course covers sword work at various types and fight choreography. The instructor is available for further coaching and choreography as needed throughout the later states of the program.

THEA219 Make-up
This course introduces basic principles of stage make-up; materials, techniques; character analysis; design, bone structure, stage lighting; make-up for the media; application of latex, prosthetics, wigs, beads; stage gore; trans-sexual and transracial make-up.

THEA220 Children's Play Performance
Student will participate in a fully produced play presented to children. This will be the student's first experience of performing to an audience other than faculty or colleagues within the school.

THEA226 Vocal Music IV
This course covers solo coaching and choice of repertoire and emphasises work currently under study, as in THEA208.

THEA300 Acting V
The course covers: Commedia dell'arte (an intense exploration to the techniques of the Italian improvisational comedy); and vocal masque (an extended solo exercise amounting to a one-man or one-woman show).

THEA301 Shawcase Performance I
The third year is largely a performance year given over to the preparation and presentation of fully staged Main Stage productions in different venues throughout the city.

THEA303 Movement V
The course covers extending range through connection with inner rhythms, instincts and emotions. Continued in THEA323.

THEA304 Dance V
This course covers rehearsal process and audition techniques.

THEA306 Vocal Music V
The course consolidates basic singing techniques, extended range, and fundamentals of good musicianship.

THEA310 Shawcase Performance II
See THEA301. There will be at least six productions throughout the year, often in groups of three presented in repertoire.

THEA314 Dance VI
This course covers rigorous drills to increase stamina and the capacity for endurance; development of physical co-ordination and naturalness.

THEA316 Vocal Music VI
This course focuses on individual and group coaching with emphasis on material used in THEA301, 310, and on the preparation of auditions.

TRP301 Technical Report
The technicol report in the third year is required as partial fulfilment of the Printing Technology diploma. The report will demonstrate a definite measure of originality in a chosen technical area and may be presented as a state-of-the-art essay.

TTP501 Academic Technical Curriculum
This course covers general mathematics, including fractions, decimols, per cent, ratio and proportion, algebraic formulae and applied geometry; measurement, including use of rulers, gauges, calipers, micrometers and verniers; blueprint reading; computer applications, including an introduction to BASIC programming. The student is introduced to job search strategies, resumé writing, interview techniques and assertiveness training.

TTP502 Trades/Technical Curriculum
The student is introduced to the use of a wide variety of hand and power tools; construction carpentry and woodworking, including turning, finishing, basic cabinet making, demolition, studding, drywall; metal work, such as drilling, tapping, cutting, milling, sheet metal layout; electricity; plumbing fundamentals, such as installation of sink and toilet; and health and safety, including use of ladders and scaffolds, safe lifting and carrying techniques and WHMIS.

TYPO102 Lettering and Typography I
This course teaches the skills of lettering and typography simultaneously. Through lectures, demanstrations, readings and projects, it provides an intense introduction to lettering and typographical skills, with emphasis placed on those skills used in the fields of graphic design and advertising.

TYPO112 Lettering and Typography II
See TYPO102

URB100/110 Urban Studies - Social Housing Management
This course acquaints the student with the origins of urban planning, the Planning Act in Ontario land use, zoning and rezoning by-laws, housing policy in Canada, Co-op and Municipal non-profit housing and management, and the structure of metropolitan and urban development.

URB300 Urban Planning
This introductory course familiarizes the student with basic planning theory and processes, with particular emphasis on the interrelationships at various tiers of government and elements of urban infrastructure.

VIN201 Wines
In this course, the student learns the fundamentals of wines from around the world – how they are produced, stored and served. In addition, the student studies marc and brandy. This course fulfils the requirements of the Wine Council of Ontario certificate.

VIN400 Italian Wines
A specialized wine appreciation course is offered throughout the program featuring Italian wines. The wines are taught in conjunction with the study of regional foods with emphasis on the utilization of wine in the Italian kitchen.

VIN576 Wines
See VIN201

WELD515 Welding
This course will introduce the student to the basics of oxy-acetylene welding. The theory portion will deal with the following topics: safety precautions; handling and using oxy-acetylene equipment; welding terminology; pressure; flame adjustments; and basic welding joints. Laboratory work will include completion of projects using the various types of welded joints, i.e., lap, butt, and corner.

WELD522 Metal Cutting and Welding - Gas
Development of working knowledge of oxy-acetylene equipment and techniques.

WELD536 Metal Cutting and Welding - Arc
Development of working knowledge of standard electric arc welding equipment and techniques.

WELD540 Oxy-acetylene Welding/Brazing/Cutting
This is a practical hands-on course covering fusion and braze welding, using the oxy-acetylene flame. Steel and other types of metals are welded in all positions and all types of weld joints are used. Pipe and tubing are fusion or braze welded. Different cutting tip and torches are used to cut and fit weld joints. Welding of cast iron, resurfacing and pressure welding on small diameter pipe is practised.

WELD541 Shielded Metal Arc Welding
Flat, horizontal, vertical and overhead fillet welds, groove welds in all positions, vertical down, welding of light gauge, carbon arc welding and carbon arc gouging, different types of electrodes and power sources, open root welding using cellulose and low hydrogen electrodes, practice for MCCR and CWB qualification, testing of weld coupons and preparation of welding test coupons.

WELD542 Welding Fabrication
Safety (general shop safety precautions; safety in handling materials and shop tools and the use of fabrication machinery) and interpretation of shop drawings, shop calculations (fractions, decimals, etc.), measurements, calculations of circumference, mean diameters, bending allowance, basic weld symbols as applied to various shop drawings, use of hand tools, operation of fabrication machinery, preparation of plate, structural shapes of steel and fabrication of various projects to shop drawings and specifications.

WELD543 Gas Tungsten Arc Welding
Welding of aluminum, stainless and hard-to-weld metals with the TIO welding process. Butt, lap, tee and corner joints in all positions are welded. Manual and remote controls are used. The use of different types of tungsten and their preparation is taught.

WELD544 Gas Metal Arc Welding
Practical exercises using solid and flux core wire include welding of mild steel in all positions. All types of weld joints are used; light gauge is welded in flat, horizontal and vertical position; open root on 3/8" plate is welded. Setting up equipment and trouble shooting of equipment are practised.

WELD550 Welding Theory
Oxy-fuel welding, brazing and cutting, shielded metal arc welding, gas tungsten and gas metal arc welding, the making and storage of weld gases, safety, power sources, types of welding current, plasma arc, pulse arc, electrode classifications; welding coats, testing of operators and welds, the making of steel and other types of metals and their weldability, and metallurgy.

WOOD100 Woodworking
The student learns the basic skills required for using hand tools and power tools. Projects use tools and skills required in piano rebuilding to make jigs for specific jobs in the piano technician field.

WOOD200 Woodworking
The student is taught to read plans for making the jigs that they will construct. Again, the jigs made are for specific jobs in the piano technician field. Prerequisite: WOOD100.

WOOD551A Woodworking Theory
See FURN102

WOOD552 Woodworking Shop
The student will learn the skills required in custom furniture and cabinetmaking and finishing in a workshop setting. The student will make shop drawings, build projects and complete exercises to learn the safe and proper use of stationary machinery (table saws, jainter, bandsaws) as well as hand tools and hand power tools.

WOOD561 Production Management
The student will be intraduced to production management, covering production planning and control, procurement, inventory control and quality control. Supervisian, plant layout and how to start a business will also be examined in detail.

WOOD562 Woodworking Shop
The student will learn drawing, layout, preparing cutting lists and making patterns of projects that are more complex. Fitting, assembly, clean-up and surface preparation of more complex projects will be included as will fitting of hardware and use of the router.

WORD119 Introduction to Microcamputers and Word Processing
This course demanstrates an understanding of key terms, concepts, and activities involved in using microcamputers. The course enables a student to access a microcamputer and use it to perform elementory word pracessing functions using WordPerfect.

WORD215 Word Processing III/ Machine Transcription
This course enables the student to produce personalized documents, lists and envelopes by using the Merge feature; create styles and insert them into documents; create, print and edit newspaper-style and parallel columns; create outlines, tables of contents, indexes and lists; sort and select specific files for sorting; and recall graphics into documents.

WORD220 Legal Word Processing/Machine Transcription I
This course enables the student to edit documents using the WordPerfect Speller, Thesaurus, block operations, and search and replace operations; enhance reports with the use of headers and footers; create macras to perform repetitive tasks; and produce personalized documents by using the merge feature.

WORD221 Legal Word Processing/Machine Transcription II
This course continues the development of skills intraduced in WORD220 and introduces the student to the preparation of legal documents using WordPerfect.

WORD223 Medical Word Processing/Machine Transcription II
This course will cancentrate an the skill required to develap proficiency in medical transcription and will introduce the student to the use of WordPerfect and prerecarded tapes to prepare formal, common medical reports using a variety of acceptable styles.

WORD224 Word Processing/ Machine Transcription
This course will cancentrate on the skills required to add farms to the printer, to maintain files an disks, to create columns of text, to create documents using standardized text, to edit documents using WordPerfect block text and search and replace aperations and to use line drow and other features.

WORD300 Word Processing
This course acquaints the student with the basic functians of a word processor. The student is expected to achieve basic campetencies on the equipment including creating and editing documents, formatting, inserting, deleting, tabulating, merging, archiving and other applications.

WORD507 Word Processing
This course is designed to acquaint the student with a commanly used piece of word processing software. Praiects produced by the student in this module will later be used to campose pages of text in the EDC courses. The student is expected to achieve basic campetencies such as creating and editing documents, enhancing document appearance, staring and retrieving documents and formatting and installing software features such as printers, tabulation, merging and archiving.

ZZBUSXX1 Entrepreneurship within the Large Corporatian
This course is designed to help students bridge the gap between small business management (entrepreneurship) to acting as an entrepreneur within a large business or carporation (intrapreneurship). The focus is an how to use the skills learned in the small business program and apply them within the larger business.

ZZELCT5XX Active Circuit Analysis (Applied Moth)
The student will practice a variety of methads af campanent replacement, learning to solder/desolder carefully and efficiently. Surface-maunt techniques will be demanstrated. Micracomputer and system fault diagnasis will be accamplished using scope, probe, logic and signature analysis and emulatian and diagnastic programs.

ZZELCT5XX Introduction to Telecommunications
Synchranaus and asynchranaus pratacals are discussed. Varaus network canfiguratians are intraduced fram a block diagram appraach. Emphasis is placed an simple computer-ta-computer communications through a madem with its associated communicatians software.

ZZMARKXX1 Marketing Your Business
Topics include consumer and industrial market segmentatian; interrelatianships between consumer and campany goals, environmental factars and the marketing mix; and marketing research. Students will be assessed an their ability to demanstrate an understanding of the market system and the steps require ta ensure successful marketing af a product ar service. This includes consumer behaviaur, marketing strategy, product management, pramatian and pricing.

ZZMARKXX2 Service Marketing
This course facuses an the marketing af a service business with particular emphasis an the marketing af a small service business. Some topics cavered are market research, planning, pramatian, pricing, after sales service and consumer behaviaur.

ZZPROXX1 Pramate your Business
This course will pravide students with a basic understanding at the principles af advertising and pramatian as applied ta small businesses. Some topics cavered include ad research, planning, media selection, ad creatian skills, and evaluatian af advertising results. Same time will also be spent an direct marketing principles.

ZZZZ Conceptual Visualization and Praduction II
This course introduces the student to the visualizatian and rendering af preliminary ideas and presentatian art through the applicatian af markers. The students learn the value af markers and how ta use them quickly and effectively.

ZZZZ Canceptual Visualizatian and Praduction I
This course intraduces the student ta the proper use of the technical tools at the graphic designer. Through a series at exercises and projects it develaps precisian and accuracy in preparatian far reproduction.

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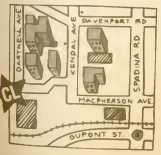

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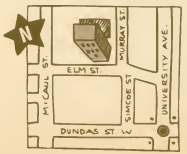

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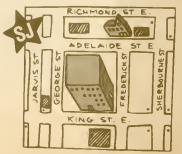

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